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ABSTRACT

The Temporary Assistance for Needy Families (TANF) program was created in 1996 from what was previously named the Aid to Families with Dependent Children (AFDC) program. The TANF program is intended to serve low-income families, primarily those with only a single parent present, as did the AFDC program. The TANF program is distinguished from AFDC by strong work requirements, time limits on receipt, options for the provision of noncash assistance, and by a block grant financing structure. This paper reviews the rules of the TANF program and the research that has been conducted on it and on the AFDC program.

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The Temporary Assistance for Needy Families (TANF) program was created by legislation passed by the U.S. Congress and signed by the President in 1996. The Personal Responsibility and Work Reconciliation Act (PRWORA) created the TANF program out of the preexisting Aid to Families with Dependent Children (AFDC) program, which itself was created by Congress in 1935 as part of the Social Security Act. The PRWORA legislation represented the most fundamental restructuring of the AFDC program since its inception. The most important restructured elements are (1) the devolution of major program design elements, and financing through block grants, to the individual states; (2) the imposition of strict work requirements in order to qualify for federal aid; and (3) lifetime limits on the number of years of benefit receipt which could be paid out of federal funds.

This paper reviews the rules and structure of the TANF program and compares them with the historical AFDC program. In addition, it reviews the caseloads, costs, and participation rates of the TANF and AFDC programs. Finally, it reviews the research that has been conducted on both programs. Given the relative youth of the former, relatively little scholarly research has been conducted on it to date. Consequently, the bulk of the research will be reviewed for the AFDC program. Some discussion will also be provided of the extent to which the results of the AFDC research can be expected to apply to the TANF program.

The first section reviews the rules and history of the programs. The second section reviews the trends in caseloads and expenditures and other program characteristics, followed by a section on the research results. A final section discusses reforms of the financial incentives in the program.

I. History, Rules, and Goals

History and Rules of the AFDC Program. Table 1 shows the major pieces of legislation creating and altering the AFDC program over its history, 1935-1996.[1] The program was created by the Social Security Act of 1935 along with the Old-Age Social Security and Unemployment Insurance programs. AFDC provided cash financial support to families with "dependent" children, defined as those who were deprived of the support or care of one natural (i.e., biological) parent by reason of death, disability, or absence from the home, and were under the care of the other parent or another relative. Although the language of the legislation was gender-neutral, in practice the vast majority of families of this type consisted of a mother and her children, or what are today called single-mother families. Although the presence of the father was possible if he was the single parent or if he was disabled, the overwhelming majority of participating families were initially, and have continued to be, those where the father is not present. In 1935 the primary reason for the absence of the father was death, but this was to change in later years as that absence was more a result of divorce or out-of-wedlock childbearing. Eligibility also required that families have income and assets below specified levels.

The AFDC program was created as shared federal-state responsibility. The states had a large role in the program for they were responsible for not only creating and administering their own AFDC programs but also in setting the level of basic benefits. States subsequently picked very different benefit levels, with benefits ranging sixfold from the most generous to the least generous. The federal role was both financial and regulatory. Financially, the federal

[1] A short, but more detailed, history of the major developments in the AFDC program can be found in Garfinkel and McLanahan (1986, Chapter 4). That discussion also includes an account of the history of income support programs prior to AFDC.

government was responsible for providing open-ended matching grants to the states, with declining match rates at higher state benefit levels. On the regulatory side, the federal government put many restrictions on the definition of eligibility and allowable resources but also on the benefit formula. In terms of eligibility, for example, the federal government defined what family structures were eligible and put restrictions on who could and could not be counted as part of the assistance unit, and also put restrictions on what income and assets could be counted for eligibility determination. Regarding the benefit formula, the federal government put restrictions on allowable deductions for earned income and also for child care and work-related expenses, effectively constraining the state's ability to set the benefit reduction rate in the program. Thus the states ended up being primarily responsible for the level of benefits, or what economists call the "guarantee," while the federal government effectively set the benefit-reduction rate, which economists sometimes call simply the "tax rate." The nominal benefit reduction rate in the program in 1935 was 100 percent, for benefits were determined by a straightforward subtraction of income from "needs" (i.e., the guarantee), and there were few deductions for income allowed.[2]

The definition of "dependent child" as resulting from the absence or disability of a parent implicitly allowed families to be eligible where the mother (or father) had remarried or was

[2] Additional complexities were present because the states actually had the right to manipulate the benefit formula in ways that altered even the tax rate. For example, states could impose maximums on the benefit paid to a family, which creates a range of a zero tax rate; could reduce the difference between the guarantee and net income (defined as income less deductions) by a defined fraction (called the "ratable reduction") which effectively reduces the tax rate by that fraction; and could impose gross income ceilings for eligibility which create a notch in the budget constraint. They also had discretion in setting allowable deductions, which alters the effective tax rate as well. See U.S. Congress (1996), Keane and Moffitt (1998, Appendix), and Meyer and Rosenbaum (2001, Appendix 1) for more details on the formula in different states. States are allowed even more discretion over the benefit formula under the new TANF program (see below).

cohabiting with a partner who was not a parent of the child. Further, stepparents and cohabitors were excluded from the definition of the assistance unit for purposes of eligibility and benefit determination, so their income was not automatically counted against benefits. In principle the income they provided to the eligible children should be counted as income to the assistance unit, but rigorously measuring intrahousehold income flows is difficult, so the enforcement of this principle was minimal. However, in 1935 the rate of remarriage was fairly low and the rate of cohabitation was even lower so these issues did not attract discussion, and did so only later when these types of families grew in the general population and in the AFDC recipient population.

A significant expansion of the program took place in 1961 when Congress created the AFDC-UP (for "unemployed parent") program to include families where both natural parents were present but where the primary earner was unemployed, with unemployment defined as the inability to find work in excess of 100 hours per month. The income and asset eligibility conditions and benefit formulas were identical to those in the basic AFDC program. The AFDC-UP program was made optional to the states, with financing at the same rate as in basic AFDC, and 25 states had created and operated such programs by the end of the decade.

The next major change in the program occurred in 1967 when Congress, concerned with work incentives in the program, lowered the nominal tax rate on earnings from 100 percent to 67 percent (2/3, to be exact). States were required to deduct $30 and 1/3 of remaining monthly earnings from total monthly income before calculating the benefit (hence the "30-and-one-third" rule). The Social Security Admendments in 1967 also created a program called the Work Incentive (WIN) Program, which required women whose youngest child was older than 6 and who did not fall into a number of exempt categories (disabled, in school, etc.) to register for

some type of work or education activity, ususally some type of job placement program. The WIN program was never effective, for, while the majority of nonexempt recipients were registered, states did not provide the funds or exert the effort to set up the necessary activities to engage more than a small number of registrants. Although there were almost no evaluation studies of WIN conducted (see below), there was nevertheless a widespread perception that the job placement operations in place were also quite ineffective.

A number of Supreme Court decisions in the late 1960s and early 1970s also were important in modifying key features of the program. One outlawed what were called state "man-in-the-house" rules, rules which made ineligible for benefits mothers who were living, even on a temporary basis, with men who were not the natural fathers of the children. The Court judged these laws to violate the original Social Security Act provision stipulating that eligibility was based solely on the absence of the natural father. A second, related decision prohibited states from counting the income of any such cohabiting men against the AFDC benefit without specific evidence that the men were providing income support to the woman and children; some states had been automatically including the male's income when calculating benefits. A third decision outlawed so-called residency requirements that some states had adopted, which required families who had moved into a state to live there for a few years before eligibility could be established. The Court judged these laws to violate the equal protection clause of the Constitution and to impose an unlawful restriction on freedom of residential location.

The growth of the Food Stamp and Medicaid programs in the late 1960s and early 1970s also affected the AFDC program. Eligibility for the Food Stamp program, although open to all individuals regardless of family type, was made automatic for AFDC recipients. Thus a close tie

between the program was established and participation in the AFDC program constituted a guaranteed entry to the Food Stamp program. AFDC families were also made categorically eligible for the Medicaid program, significantly raising the generosity of program benefits. Unlike the case of Food Stamps, however, non-AFDC recipients faced more difficult eligibility hurdles for Medicaid and were often ineligible until the 1980s (see the chapter on Medicaid in this volume). A third program of some importance that grew more in the 1980s is the Earned Income Tax Credit, whose amounts were required by Congress to be excluded from AFDC recipient income for the purpose of benefit calculation in order to encourage work.[3]

Throughout the 1970s a number of welfare reform proposals were considered by Congess and successive Administrations but were either never proposed to Congress or were proposed and not passed. The Nixon Administration proposed, with its Family Assistance Program, replacing AFDC with a program more resembling a negative income tax--with a low marginal tax rate--and which would have federalized the program and hence removed it from the control of the states, a reform much discussed in the 1970s in an attempt to eliminate the large cross-state variation in benefits. The legislation did not pass Congress. The Ford Administration considered a welfare reform proposal with a number of features but, most notably, a considerable strengthening in the work requirements of the program; the program was never submitted to Congress. The Carter Administration submitted to Congress a major welfare reform proposal which, like the Family Assistance Program, would have federalized the program but which introduced, for the first time, significant added work requirements. The legislation was not

[3] Food Stamp benefits were also excluded from the AFDC benefit calculation, as were housing subsidies in most states. SSI benefits were excluded but SSI recipients were not allowed to be covered by AFDC anyway (i.e., they were excluded from the AFDC assistance unit).

passed by Congress.

The next major piece of legislation passed by Congress was the Omnibus Budget Reconciliation Act of 1981, which had several important features. The tax rate on earnings in the program was increased to 100 percent, up from the 67 percent provided for in the 1967 Amendments, on the argument that this would concentrate benefits on the lowest income families and hence those most in need.[4] In addition, for the first time Congress required states to count a portion of stepparent income against the grant regardless of the amount of financial support that the stepparent might be determined, by some calculation, to have provided to the mother and her children. Congress also put an upper limit on the gross income that a family could have to be eligible, thus eliminating the possibility that high levels of deductions could allow such families onto the rolls. A fourth important feature of the legislation, little noticed at the same but which became important later, was a provision allowing states to experiment with new AFDC work provisions that were at variance with federal law and federal regulations, and to seek "waivers" to test alternative provisions that they might be interested in. The "WIN demonstrations" of the 1980s, as they were called because they were modifications of WIN, allowed states to experiment with community work programs, work supplementation programs, heightened job search, and other programs to strengthen the emphasis on work and improve upon their WIN programs.

Subsequent to 1981 and throughout the early and mid-1980s, states began taking advantage of the waiver provisions in the 1981 Act and, eventually, virtually all states conducted

[4] The recipient was allowed to work for four months with the 30-and-one-third reduction rule, but further earnings were taxed at the 100 percent rate. Later, the flat $30 exemption amount was allowed for 12 months.

WIN demonstrations. These demonstrations typically tested low-cost programs that required some type of job search activity, although some also required recipients to simply work--usually in some community service job like cleaning up a public park--in exchange for their benefits ("workfare"). A few states were more ambitious and tested more expansive employment programs that attempted to provide more basic skills training or substantive work experience. Many of the demonstrations also narrowed the list of conditions allowing a recipient to be exempt from participating in these programs. The 1980s thus witnessed the beginning of significant AFDC reform activity initiated at the state and local levels, a new trend in light of the history of reform activity which had theretofore occurred primarily at the federal level.

The state activity on increased work requirements led to increased Congressional interest in work and culminated in the passage of the 1988 Family Support Act, whose most important feature was the creation of the Job Opportunities (JOBS) Program. The JOBS program replaced WIN and was to require much larger numbers of welfare recipients to engage in work-related activities, both by reducing the number of exempt recipients as well as mandating that states engage a minimum fraction of its eligible recipients in some type of acceptable activity (called "participation" requirements). In addition, and equally important, the legislation strongly encouraged, and partly required, states to conduct not only low-cost job-search programs that had been dominant in the WIN demonstrations but also some human-capital, education and training programs that would increase job skills of AFDC recipients, a major change in orientation.[5]

However, over the years subsequent to 1988, states failed to implement JOBS programs

[5] See U.S. Congress (1994) for a discussion of the JOBS program rules and see Gueron and Pauly (1991) for a discussion of the shift in employment philosophy that JOBS represented.

to any significant degree. They failed to draw down all the federal matching funds made available to them to subsidize the programs, and they did not put in place the necessary programs to enroll eligibles on a wide scale. As a result, many states never achieved the participation requirements in the Act. The most common explanation for this failure was the onset of a recession in the late 1980s, which put pressure on state budgets and made it difficult to allocate funds to JOBS, but the administrative difficulty in creating JOBS programs was gradually realized to have been underestimated and this also played a role. It was also gradually realized that full implementation of the JOBS program would require a significant increase of expenditures and hence was unlikely in the short run to generate cost savings.

In an attempt to provide more financial work incentives, the Family Support Act also required states to offer "transitional" child care and Medicaid benefits, benefits provided to families who had left the welfare rolls because of employment or increased earnings, for up to 12 months following exit. States were allowed to require copayments for child care and were required to charge premiums for the second six months of Medicaid benefits. In practice, these provisions were little used by exiting welfare mothers, for reasons that have never been fully studied. Some experts speculated that the paperwork burden of continuing to establish eligibility combined with the relatively short time frame of extended benefits (twelve months), together with the copayment and premium provisions, discouraged takeup.

Finally, the Family Support Act expanded AFDC-UP, mandating that all states offer the program. However, the law only required states to offer benefits to unemployed families for six months out of the year, and many states initially without UP programs elected to meet only this minimum requirement when creating their program subsequent to the Act.

Although the Family Support Act of 1988 was considered at the time to be landmark legislation which would lead to fundamental changes in the program, its failure to do so has left it as a fairly minor and transitional piece of legislation in the history of the AFDC program. Interest in further reforms of the system did not die down after the Act but instead increased in intensity. For example, the goals of reform started shifting almost immediately from a human-capital, education-and-training emphasis embodied in the Act, to an emphasis on work per se, regardless of training content. Another notable shift subsequent to the Act was a shift toward caseload reduction per se as a goal, which had not been a major focus of the Act. In part this change may have been a result of the rising caseloads and expenditures in AFDC over the late 1980s and early 1990s (see below). Finally, an increased interest in family-structure issues and nonmarital childbearing occurred in the period subsequent to the Act.

This increased welfare reform activity took place, as it had in the 1980s, mainly at the state level. With encouragement from the Bush and Clinton administrations, states over the early 1990s increased their initiation of AFDC waiver programs testing alternative features of reform. An increased emphasis on work requirements, in particular to the exclusion of human capital and education programs as just noted, was present in almost all state efforts. Most states also began imposing "sanctions" (i.e., temporary or permanent withdrawal of benefits) on recipients for failure to comply with work and other requirements. Although such sanctions had been present in some form previously, they had never been as aggressively enforced. The increased emphasis on work requirements was often accompanied as well by a reduction of marginal tax rates on earnings to provide financial incentives to work, for the federal rules still required 100 percent rates. Many other features also began to be introduced in state waiver programs, including (1)

the provision of time limits on benefits, stipulating that recipients could not receive benefits for more than a certain number of years (2 to 5, for example), at least within a given calendar period; (2) the imposition of family caps, which specified that AFDC recipients would not receive higher benefits if they had additional children while on AFDC; and (3) an attempt to reintroduce residency requirements by formulating "two-tier" programs under which in-migrants were not denied benefits but rather were given lower benefits than initial residents for some specified period.

Another new feature of the state waiver programs in this period was an increased tendency to test programs which contained multiple reform features simultaneously, for example, simultaneously strengthening work requirements, enforcing sanctions, imposing time limits and family caps, etc. Prior to this period, the waiver programs formulated by states had tested only one or two reform features at one time. These reform "packages" were intended to test new programs which differed in their entirety from the AFDC program, and were intended to have a cumulative impact which would be greater than the sum of the impact of each reform individually. More generally, they represented a political desire for a major, wholesale change in the AFDC program rather than incremental change.[6]

A final new feature of the waiver programs over this period was an increased tendency to "test" the new programs on the entire state AFDC caseload, whereas prior to this period the waiver programs had been tested on the caseload in only one or two counties, cities, or local offices. These statewide waivers had the effect of essentially replacing the existing AFDC

[6] See U.S. DHHS (1997) and Harvey et al. (2000) for a summary of the provisions of the state waiver programs in this period.

program with the reform program for the entire state, at least for the lifetime of the waiver, which was usually several years. As waivers of this type grew in number--40 states had requested and been granted waivers by 1995--the waivers gradually ceased to be small-scale experiments and began to envelope a major portion of the national caseload and hence to gradually eliminate the AFDC program de facto.[7]

TANF. Congress subsequently took action in 1996 by enacting PRWORA, which simultaneously reduced federal authority over the program but also mandated many (but not all) of the popular state-level waiver features with federal law. Table 2 summarizes the differences between AFDC and TANF. The PRWORA legislation converted the previous matching grant to a block grant and removed much of the federal regulatory authority over the design of the program. Thus states are free to set their benefit levels, as before, but also the tax rate, income limits, asset requirements, and even the form of assistance (cash or in-kind services). The last provision is important because it allows states to use TANF dollars to support child care, job search support, social services, and other types of expenditure; there are no requirements on how much or little must be spent on cash aid directly. In addition, no federal definition of who is to be included in the assistance unit is imposed; the AFDC-UP program is abolished and states cover two-parent families at their own discretion. States are free to impose family caps. In addition, and importantly, the entitlement nature of the program is abolished and states are not

[7] The federal government generally required states to conduct random-assignment evaluations of their reforms. When states moved to implementing reform programs on the full state caseload, they usually complied with this requirement by holding out a small group of "control" families to be administered the old AFDC program. A major problem with these experiments was that it was difficult to prevent the control families from perceiving, and being affected by, the overall programmatic change in the state that occurred around them. See below.

required to serve all eligibles.[8]

At the same time, however, the law imposed new federal authority in a few specified areas. Federal funds are not to be used to pay adults for more than 60 months of TANF benefits over their lifetimes, although states are allowed an exemption from this requirement for 20 percent of their caseloads. Minors who have dependent children are required to stay in school and live with their parents in order to receive federal TANF dollars. Aliens are ineligible for five years after their entry into the U.S. and longer at state option. In addition, while the JOBS program is abolished, new work requirements are imposed that are require that much greater fractions of the caseload be involved in them, and which exempt many fewer families (as many as 50 percent of single mother recipients and 90 percent of two-parent families must comply). Recipients involved in general education and training cannot be counted toward these participation requirements. The hours of work per week required are also greatly increased (up to 30 hours/week for single mothers and more for two-parent families).[9]

The most dramatic departures from the AFDC program are the time limit and work requirement provisions. Lifetime time limits are a new concept in U.S. transfer programs and are based on a quite different philosophy of the aims of public assistance than has been the case

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[8] While reducing federal regulation, the law did impose specific penalties on the states for not complying with the mandated provisions of the law. These penalties took the form of percentage reductions in the block grant allocation for each type of violation.

[9] The work participation requirements have been considerably ameliorated thus far by another provision of the law which reduces those requirements in proportion to the amount of caseload reduction a state experiences. Because caseloads have fallen dramatically, these participation requirements have been greatly reduced as well. However, this provision of the law also gives states an incentive to reduce the caseload because it lowers the level of mandated work requirements.

heretofore. States are allowed certain types of exemptions from the time limits and are also allowed to grant temporary extensions to individual families, so long as the total number does not exceed 20 percent of the caseload. The work requirements in the new legislation are much stronger than in previous law and change the orientation from education and training to work per se. The law also allows states to impose sanctions on recipients for failure to comply with the work requirements, sanctions which are much stronger than in past law and which have been enforced rigorously. The work emphasis of the law is further reinforced by an increase in the funds made available for child care.[10] At the same time, any system of work requirements must specify some exemptions from them, and states are allowed to exempt families with specified types of difficulties.

Several other PRWORA provisions are worth noting for their importance. States are required to maintain expenditures from their own funds at a level at least 75 percent of that prior to PRWORA (the so-called "maintenance of effort" provisions). This maintains a semblance of a matching grant system for the time being. A major point of discussion between the federal government and the states has been over whether these funds can only be spent on recipients eligible for TANF dollars or more generally spent and, if the latter, whether there are any categories of expenditure that funds cannot be spent on. Regulations issued in the Spring of 1999 by DHHS interpret the law fairly broadly and allow the funds to be spent on a wide variety of sources, giving states considerable flexibility as a result. Another important financing provision was the creation of a contingency fund for the states to draw on in times of high

[10] However, the guarantee of child care that existed under AFDC is abolished. That guarantee was widely seen by states as a constraint on their ability to increase employment among recipients.

unemployment. The strong performance of the U.S. economy since 1996 has made this contingency fund of little relevance thus far but it could be important in the future if the economy turns down. Another provision in PRWORA provides for bonuses to the five states who most reduce their out-of-wedlock childbearing rates and their abortion rates.

Since the 1996 Act, states have moved forward vigorously to design TANF programs that are very different from their AFDC programs prior to 1990, not only to comply with the provisions of the law but also to alter program features that go beyond the minimum required. A good example is the important case of time limits. Table 3 shows the limits adopted by the states in the first year after TANF. Only a slight majority of the states--27--have adopted the simple PRWORA standard of a 60 month lifetime time limit. The rest of the states have adopted some other type of plan and, in fact, most of these states have adopted time limits that are stricter than those required by PRWORA, sometimes dramatically so.[11] For example, eight states impose not only a lifetime limit but also a shorter limit over fixed calendar intervals (e.g., no more than 24 months of receipt in every 60 months of calendar time). Eight other states simply impose a shorter lifetime limit than 60 months; the shortest of these is Connecticut, at 21 months, a very stringent limit. However, Arizona illustrates a variation that many states have considered--a lifetime limit only for adults, so that children can continue to receive benefits beyond 60 months (paid for out of state funds). Six other states besides Arizona have adopted these "reduction" rather than "termination" policies, which constitute a relaxing of the time limits implicit in

[11] However, the large states in the U.S.--who have a disproportionate share of the caseload--do not have time limits below 60 months (and Michigan has none at all).

PRWORA (Gallagher et al., 1998, Table 6).[12] The other six states in the table have more complex provisions which introduce new criteria into the time limit imposed and hence open the door to individual-specific considerations related to need and job availability.

The states have also embraced work requirements and sanctions vigorously. The most notable movement has been toward a "Work First" approach in which recipients and new applicants for benefits are moved as quickly as possible into work of any kind, with an deemphasis on education and training. States have imposed strong sanctions for failure to comply with these requirements, usually beginning with an initial partial sanction at first noncompliance and then graduating to a more severe, full sanction at subsequent noncompliance. Seven states have imposed a lifetime ban on eligibility if an adult receives a certain number of sanctions; in Georgia, for example, two sanctions will trigger this prohibition. Many states have also lowered the age of the youngest child which furnishes exemption from the requirement down to one year or 6 months, and have otherwise tightened up on exemptions from the regulations (Gallagher et al., 1996). The work requirements have also been strengthened by frequent requirements for job search and work registration at the point of application for TANF benefits that must be complied with before benefit receipt can begin.

With the aim of reinforcing these work requirements, states have generally lowered their tax rates. Table 4 shows state-by-state changes as of October 1997. While 10 states have kept the AFDC disregards (i.e., no disregards beyond $90 after 12 months of benefit receipt), the rest

[12] It is worth noting at this point that the PRWORA legislation imposes the limit only on a family in which there is an adult caretaker who has been on welfare for 60 months, regardless of how long the children have been supported. In principle, children could be put under the care of a different relative and be eligible for another 60 months of benefits.

of the states have lowered their tax rates considerably. Many states have a tax rate of 50%, while there is a distribution above and below this value as well. A few states have 100% disregards, implying a tax rate of zero; these states limit benefits by imposing income limits of one form or another on eligibility (at which point the tax rate is effectively greater than 100%).

States have altered some of the other financial aspects of eligibility and the benefit formula but not all. Asset limits have generally been raised as have gross income limits, but benefit levels themselves have for the most part been left the same as they were prior to PRWORA (Gallagher et al., 1998). The 100-hour rule limiting work in two parent families has been dropped in the majority of states, who treat two-parent families the same as single-parent families in regards to work incentives and eligibility. Family caps have been adopted in twenty-two states, and one state (Wisconsin) has adopted a flat benefit that does not vary at all with family size. There has been significant reduction in the use of the child-support pass through (the requirement that the welfare recipient receive the first $50 of child support payment from the father).[13] Finally, the majority of states have adopted some type of "diversion" program which seeks to divert families who have applied for TANF from coming onto the rolls. One type provides a family with a lump sum cash payment together with a stipulation that they cannot reapply for a set number of future months. Another provides families with child care, medical, or transportation services to assist them in cases where they are judged to be only temporarily needy. A third, common, program requires recipients to engage in a specified period of job search, sometimes merely by registering with a work agency but often requiring that the applicant

[13] Details on state-specific benefit formulas can be found in the Welfare Rules Database of the Urban Institute (http://anfdata.urban.org/wrd).

show evidence of having applied for jobs or having contacted employers. The individual cannot be considered for assistance until the requirement is met.

Goals of AFDC and TANF. The AFDC and TANF rules implicitly reveal many of the goals of the programs as they have changed over time. Originally the AFDC program was intended only to provide cash support for widows and their children, at a time when married women were commonly expected not to work and to stay at home to raise their children. Over time, as the general labor force participation rate of women with children rose, and as the composition of the caseload shifted toward divorced and unmarried mothers, the goals of the program gradually shifted as well to encouraging and requiring work to accompany the cash benefit. This shift took a major additional step with the state level welfare reform efforts in the early 1990s and with the 1996 passage of PRWORA, where the goals of the program were moved toward the employment goal much more strongly than had been the case in the past.

Another significant shift in goals in the 1990s has been the shift from an education-training strategy toward a pure work strategy. There has been a tension between these two strategies ever since the employment goal began to enter into programmatic discussions in the late 1960s. The education-training strategy, or what was sometimes called the human capital strategy, aimed to improve recipient skills and potential wage rates in the labor market, whereas the pure work strategy emphasized instead work per se, even if the education or training content was not high. The education-training strategy is more expensive and has an uncertain rate of return but holds the promise of long-run improvement, whereas the pure work strategy is relatively inexpensive and promotes employment directly but may do less for long-run earnings capacity. The education-training, or human capital, strategy was most forcefully embodied in

the Family Support Act of 1988 but the 1996 PRWORA strongly reoriented the strategy toward a pure work goal.

But the PRWORA legislation represented more than simply a redirection of the employment goal and an increased emphasis on work. A new goal appeared which was to reduce "dependency," a term much used in public discussions, which is more or less defined as long-term receipt of welfare benefits. Such dependency is presumed by the PRWORA legislation to have deleterious effects on adults and children, a hypothesis upon which research has a bearing. The time limits embodied in PRWORA are intended to reduce dependency directly by simply disallowing long-term receipt, thereby providing only temporary assistance to families. There is also an implicit hypothesis in the notion of a time limit that welfare recipients are capable of becoming "self-sufficient" off the rolls, where "self-sufficiency" is meant the attainment of a reasonable and sustainable level of income that is enough to allow a family not to have to apply for public support. The time limit provisions implicitly presume that it is possible to become self-sufficient after five years or less of welfare receipt, another hypothesis that is in principle possible to test.

Another new goal of welfare programs in the 1990s has been to reduce the rate of nonmarital childbearing and to encourage marriage. This goal is explicitly stated in the preamble to the PRWORA legislation but the law itself has very few provisions directly relating to it.[14] In part this is because it is presumed that reductions in dependency will lead to reductions in such childbearing and an increase in marriage, another hypothesis that can be subjected to test. The

[14] Of the four principal goals of the PRWORA legislation given its preamble, only one relates solely to assisting the poor; the other three relate to increasing marriage and employment and to reducing nonmarital childbearing.

lack of direct provisions in PRWORA on childbearing and marriage is also partly the result of a lack of confidence by Congress in the efficacy of any specific set of programs aimed at those outcomes.

II. Caseloads, Expenditures, Participation, and Recipient Characteristics

Expenditure, Caseload and Benefit Trends. The AFDC program experienced uneven growth of expenditures and caseloads over its lifetime. While program growth was essentially comparable to population growth from 1935 through the late 1950s, expenditures and caseloads began to pick up in the 1960s. Figure 1 shows the growth of real per capita expenditures in the AFDC program from 1970 to 1995.[15] A notable change in AFDC expenditures occurred in the early 1970s (a continuation of an upward trend which began in the late 1960s) which ran through about 1977, a period known as the "welfare explosion." Expenditures subsequently declined in real terms, until the early 1990s, when they underwent another period of growth, albeit much smaller in magnitude than that in the 1970s. This period of growth was not sufficient to offset the long-period decline, however, and by 1995 per capita expenditures on the AFDC program were at about the same level they were in 1972.

The second line in Figure 1 shows per capita expenditure trends in the TANF program and for a reconstructed set of expenditures for the AFDC program to restore some measure of comparability. TANF expenditures cover many types of activities (e.g., jobs programs and emergency assistance) that were not included in official AFDC expenditures. As the line shows,

[15] This figure and all subsequent ones uses the Personal Consumption Expenditure deflator (base 1996) for conversion to real amounts.

expenditures including these additional programs were slightly higher than official AFDC expenditures but have fallen rapidly in the TANF program. This decline is largely a result of the decline in the caseload, as discussed next.

The upper line in Figure 2 shows the per capita caseload in the AFDC and TANF programs. The AFDC caseload grew dramatically in the early 1970s (again, a continuation of a trend which began in the 1960s) and then gradually declined until 1982 and leveled off for the rest of the decade. A new surge of growth occurred in the early 1990s, followed by a decline which began before 1996 but accelerated after it and led to a caseload level by 1999 which had fallen below its level in 1970. Overall, the pattern of caseload growth generally follows the pattern of expenditures in Figure 1. Indeed, a decomposition of the per capita expenditure growth into caseload per capita and expenditures per recipient through 1995 shows that the former explains essentially all of the expenditure patterns (Moffitt,2001). The same correlation appears after 1995. Expenditures per recipient changed very little over the entire period.

The lower lines in Figure 2 show trends in the fraction of single mother families who received AFDC or TANF benefits, and in the fraction of earnings-poor single mother families who did so.[16] Participation rates grew rapidly in the 1970s and then declined somewhat through the early 1990s. Moffitt (2001) has shown that the fraction of the population that is in single mother families grew steadily over the period and accelerated during the 1980s and early 1990s; this growth kept the caseload from falling even more than it did from the decline in participation rates of single mothers alone. Indeed, the spike in the caseload in the early 1990s is not reflected

[16] "Earnings poor" families are those below their poverty threshold on the basis of family earnings alone. Only single mother families are shown because married families have always been a minor fraction of the caseload.

in participation rates and is instead a result of the continued growth of single mother families. Starting around 1994, participation rates declined drastically along with the caseload. The caseload decline was entirely the result of the drop in participation, for, at least through 1999, there was no dropoff in the number of single mother families (U.S. DHHS, 2001, p.III-50).[17]

Figure 3 shows trends in real welfare benefits for a family of four over the 1970-1998 period.[18] The lower line in the figure shows that for AFDC-TANF, while the upper two lines show figures for the combined sum of AFDC-TANF, Food Stamps and Medicaid. The higher of the two latter lines shows the straight sum of the three, while the lower of the two discounts the Medicaid benefit by an estimate of its cash-equivalent value and also takes into account the taxation of AFDC-TANF income by the Food Stamp program.

The figure shows that AFDC-TANF benefits by themselves have declined secularly since 1970, and hence cannot provide an explanation for any of the positive or negative fluctuations in the caseload or in participation rates conditional on single motherhood shown in Figure 2. Mechanically, the decline in benefits results from a failure of states to raise nominal benefit levels to keep up with inflation. There has been very little change in this trend during the TANF program; indeed, the benefit decline has slightly leveled off.

Nevertheless, it is important to note that Food Stamps and Medicaid were not received by many familes in the late 1960s and came into their own only in the early 1970s, when they

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[17] The decline in participation was not a result of increases in income which made more single mothers ineligible. The decline in the participation rate of poor single mothers in Figure 2 suggests this, but when income eligibility is more precisely determined, the data show a decline in the participation rate of income-eligible families as well (U.S. DHHS, 2001, p.II-21).

[18] The figures show the maximum amount paid for a family with no other income, or what economists commonly call the guarantee.

rapidly expanded around the country. AFDC-TANF recipients are automatically eligible for benefits from both programs. Consequently, a proper comparison of the change in benefits received by AFDC recipients is more closely approximated by comparing the AFDC benefit alone in 1970 to the combined benefit in 1975 and after. By that comparison, there was a strong growth of benefits in the early 1970s, thus providing a possible explanation for the growth in the caseload and in participation rates over that period. Moreover, the decline in the combined benefit subsequently has been entirely the result of the decline in AFDC benefits, for Food Stamp benefits have remained relatively constant in real terms and real Medicaid benefits have grown slightly. On net, by 1998, the combined benefit was still higher than the AFDC benefit alone in 1970.

The AFDC-TANF benefit decline after 1996 is also somewhat misleading because of the increase in the fraction of TANF expenditures spent on non-cash services. Figure 4 shows the distribution of 1999 TANF expenditures by spending category and shows that only 59 percent of monies were expended on cash aid. The rest was spent on work activities, child care, administration, and a number of other types of categories (including social services). Indeed, when the post-TANF expenditures in Figure 1 are divided by the number of cash recipients shown in Figure 2, it can easily be seen that expenditures per recipient have actually increased after 1996, rather than fallen. In large part this is simply because the caseload has declined so drastically that states have used their block grant monies for other, non-cash categories.[19]

[19] There is unfortunately no concrete data on how many of the recipients of the non-cash expenditures are AFDC-TANF recipients and how many are either former recipients--namely, those who have left the welfare rolls--or even poor families who have never been on AFDC-TANF. This makes the expenditure per recipient calculation potentially misleading, for the monies are now spread over a large population. Along with the decline in expenditures has

Recipient Characteristics. Table 5 shows the trends in a few characteristics of the AFDC and TANF caseload 1969 to 1999. The percent of the caseload with earnings was only 13 percent in 1979 but dropped further in the 1980s, largely because of 1981 federal legislation which increased the tax rate on earnings to 100 percent (see Table 1), effectively making many working families formerly on AFDC ineligible for benefits. The percent with earnings is a much higher 25 percent by 1999, a reflection of the emphasis of current welfare reform on work.

The age of recipients appears to be slightly increasing and family size is declining, though most of the decline in the latter occurred in the 1970s. The fraction whose youngest child is less than 2 has also declined in the 1990s, either because of a general decline in in the population of families with children in this age range or because mothers with very young children have left the welfare rolls. Another important trend has been an enormous increase in the 1990s in the fraction of the caseload composed of child-only cases. These are cases in which benefits are received by children but the parent, or other adult caretaker, is herself ineligible for benefits. Such ineligibility can occur if the parent is a non-citizen immigrant but the children are citizens; if the children are cared for by a non-parent with income above the TANF eligibility level; or if the parent has been sanctioned for violating one of the many TANF rules (including those for work requirements) or has reached a TANF time limit and has gone off the rolls. The last category occurs only in those states with "partial" sanctions--that is, in the case of a violation only the portion of the benefit designated for the adult is terminated--and in those states where the time limit is applied only to the adult, not to the children. In child-only families, none of the work requirements or time limits affect benefits or eligibility because they are assessed only on

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probably been a redistribution within the poor population.

adults.

The last row of the table shows trends in the fraction of the caseload without a high school education. This fraction declined seculary as it did for the population as a whole from rising levels of education. However, it has increased slightly since 1996, possibly a sign that more educated recipients have left the rolls in the massive caseload decline illustrated earlier. This would leave the caseload more "disadvantaged" than it had been before.[20]

The types of single mothers on AFDC also shifted over time, as shown in Figure 5. Initially most single mothers were widows, but in the 1960s and 1970s the majority were divorced and separated women. In the 1980s and 1990s, the majority were composed of unmarried single mothers. These trends have contributed importantly to the perception of welfare recipients by the general public and have probably increased its unpopularity.[21]

III. Research on the AFDC Program

This section reviews the research literature on the AFDC program. AFDC has received more research attention from economists than any other welfare program. AFDC was the most well-known cash means-tested program in the mind of the general public and policy-makers. Its benefit structure was also fairly simple and came closest, among all means-tested programs, to the simple textbook model of such a program with a single guarantee and a single tax rate on

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[20] The evidence on whether this type of selectivity has occurred is weaker than one would predict. See Moffitt and Stevens (2001), Moffitt et al. (2001), and Smith (2001), and the references therein.

[21] For a study of how the general public perceives welfare recipients, and how that perception is affected by the marital status of recipients, see Moffitt (1999b).

income. This made it particularly well-suited to the study of work incentives, which has always been the main interest of economists, beginning with the discussions of a negative income in the 1960s.

Research on the TANF program is considered in a separate section below.[22] There is much less research on TANF and, further, the character of that research is generally quite different than that on the AFDC program, as will be seen from the review. Nevertheless, research on AFDC is still quite relevant to the TANF program because academic AFDC research deals, by and large, with fundamental response issues--the effects of benefits and tax rates on behavior--and not with the effects of specific subfeatures of AFDC which are not so generalizable. Consequently, AFDC research is still relevant in the TANF era, albeit in a generalized sense.

Although the issue of work incentives is by far the major area in which AFDC research has been conducted, some studies have also been conducted on many other issues as well. The review below will include the main areas of such research: dynamics and turnover in the program; employment and training programs; effects of the program on demographic and family outcomes; and research on the state determination of benefits. The sections below on each of these topics will first consider the economic models used to analyze them, followed by a review of the empirical evidence.

Work Incentives

[22] That section includes research on the AFDC waivers of the 1990s because those waivers, while conducted within the AFDC program, are best understood as precursors to TANF.

Models. Economists' research on AFDC, as on most welfare programs, generally has taken the redistributive goals of the program as given and has tended to focus on the behavioral incentives and disincentives provided by the program structure and benefit formula. For work incentives, there is a well-developed model for analyzing these incentives--the static labor supply model--which has been the workhorse of this literature. The model has endured because it can capture the simple labor supply effects of a wide range of elementary program alternatives.

The model is illustrated with the familiar income-leisure diagram in Figure 6, where the non-transfer constraint is shown as ADE with slope -W (the hourly wage rate) and it is assumed that there is no non-program nonlabor income (N). The benefit formula (allowing positive N) is $B = G - t(WH+N)$, where H is hours of work, generating the transfer constraint shown as ACD, with slope $-W(1-t)$. Here t is the marginal tax rate on benefits and the intercept G is the guarantee level. The introduction of the program where there was none before uncontrovertibly reduces (or at least does not increase) labor supply because income and substitution effects go in the same direction. Those initially on constraint AD will move to CD, reducing labor supply, and a few of those initially above point D will reduce labor supply to go onto the program (indifference curves not shown).

An increase in G, which shifts up segment CD, reduces hours of work in this model if leisure is a normal good, but the more important comparative static is that induced by a reduction in t. The negative income tax, a program originally proposed by Friedman (1962) and promoted by Lampman (1968), Tobin (1966), Tobin et al. (1967), and many others thereafter, was intended to provide work incentives by such a reform. Figure 7 shows the effect of a reduction in t from 1.0 to some lesser value by the shift from CD to CD'. It is now a well-known result that the

effect of such a reduction is ambiguous in sign. While some of those who are initially on welfare and not working increase their hours of work (Arrow 1), those in the newly-created eligible region will reduce their labor supply (Arrow 2) as will some of those at higher income levels who are initially ineligible (Arrow 3). Whether labor supply on net increases or decreases depends on the relative numbers of individuals at different points and on the magnitudes of their responses.[23] The ranges of G and t in the AFDC program typically resulted in a program breakeven point (D or D') somewhere in the part-time hours range, so the effect of a reduction in t was thought to increase part-time work both by pulling nonworkers up to that range and inducing some full-time workers to reduce work to part-time (to obtain benefit supplementation).

This result is a special case of a larger principle that has bedeviled welfare reform, namely, that any reform that provides a benefit to those on welfare that is not available off welfare tends to draw families onto the program, thereby increasing the caseload and decreasing labor supply. Providing benefit supplementation to those who work while on welfare--but not to those who are off welfare--is one example, but so is providing medical benefits, child care subsidies, and education and training programs, if those are provided only to those on welfare and not those off. There is no way within this general class of budget-constraint manipulations of the welfare formula to avoid these effects entirely, although they may be avoided by making such benefits universal and hence available to those off welfare as well as on.

With a minor modification, the model also provides a simple theory of welfare

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[23] The decrease in t has ambiguous effects on work effort but unambiguously increases the caseload and the participation rate in the program. The early literature on reductions in t (e.g., Aaron, 1973) emphasized that there is a tradeoff between work incentives and program costs for this reason. But, in fact, the tradeoff is more unfavorable than this implies because a reduction in t may not only increase costs, it may also not increase labor supply.

participation, which is also a useful tool in analyzing the AFDC program. Denoting V(W', N') as the indirect utility obtained by an individual on a linear budget segment with slope W' and rightmost intercept N', we can write the determinants of welfare participation--P, equal to 1 if the individual participates and 0 if not--as:

$$P^* = V[W(1-t), N(1-t) + G] - V[W,N] - C \quad (1)$$

$$P = 1 \text{ iff } P^*>0; \quad P=0 \quad \text{otherwise} \quad (2)$$

where C is some implicit cost attached to being a welfare recipient. That cost may be a "stigma" cost--the individual suffers a utility loss from being on welfare per se--or a time and money cost arising from the process of applying for the program and complying with its ongoing reporting and other requirements. The first two terms in (1) imply that participation propensities are increasing in G and decreasing in t, and there is a presumption (though not strictly required by theory) that they are decreasing in W. The basic tradeoff in the model faced in the participation choice is between the potential benefit, on the one hand, and potential earnings off welfare, on the other. Welfare costs (C) are needed to explain why participation rates of eligibles are less than 100 percent--as all data calculations show them to be--for this implies that some families will be observed to be on segment AD in Figure 1 and do not take advantage of a potential increase in income by going onto welfare. Note that eqns (1)-(2) also cover the participation choice between locating above the breakeven point D in Figure 1 and below it, as well as the choice between segment AD and CD.

Evidence. There have been three major reviews of the literature on the effect of AFDC

on labor supply (Danziger et al., 1981; Moffitt, 1992a; Hoynes, 1997) which cover most of the work on that topic. The studies as a whole confirm that AFDC reduces labor supply, and the estimates of its effect range from 10 to 50 percent of non-AFDC levels. Mean labor supply in the absence of AFDC is generally only about 20 hours per week, however (including nonworkers), so the absolute magnitude of the reduction is not as large as might be expected.[24] Probably the major methodological problem with these estimates is the obvious one that they are not based on any data in which AFDC was literally absent, but rather are extrapolations from estimated effects of the level of the AFDC benefit down to a benefit level of zero. Benefit-level estimates (really, effects of G) are obtained from cross-state variation in benefits, which, although large, does not include zero benefits. These estimates must therefore be treated with some caution.

This literature also generally estimates income and substitution effects on labor supply, usually based, at least in part, on variation in G and t across states. This itself is also problematic because, while there is considerable variation in G, as just noted, the nominal level of the tax rate is set by the federal government and hence is constant across states. Sometimes this problem was circumvented by constraining the effect of t to enter through W(1-t), thereby allowing wage variation to identify the coefficient, or, preferably, from variation in effective tax rates which arise from a variety of sources. [25] Either approach has problems. In any case,

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[24] The estimates suffer from a data problem, namely, that they use household surveys which only contain information on hours of work over an entire year (divided by 52), which includes both welfare and nonwelfare weeks. Thus the estimates are themselves some average over weeks in which the individual was on welfare and weeks in which she was not.

[25] See n.2 for ways in which states could manipulate the tax rate. These variations only changed the tax rate over some ranges of the data and hence still require some parametric

however, the elasticities estimated in the papers generally fell into acceptable ranges as those are defined by the general labor supply literature for women and single mothers, with moderately large and negative income effects and moderately-sized and positive uncompensated substitution effects. But, as noted in the Models section above, the net effect of changes in t on labor supply depends on the relative magnitudes of offsetting effects in a positive and negative direction, and here the evidence suggested that the net effect was reasonably close to zero; that is, that the positive and negative incentive effects of changes in t essentially cancel out. As noted by Moffitt (1992a), this finding was consistent with the relative invariance of hours of work among female heads in time series before and after the 1967 and 1981 changes in the tax rate in the AFDC program. This major finding greatly reduces the case for a negative income tax, at least one that is available only by being on AFDC and not off.[26]

There have been relatively few new studies of AFDC and labor supply since the past reviews. Three are noted in Table 6. Hoynes (1996) studied the AFDC-UP program and found it to have significant negative effects on the labor supply of husbands and wives, but that marginal reductions in t had little effect, consistent with prior work. Keane and Moffitt (1998) focused on the labor supply effects of participating in multiple programs, including not only

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restrictions to obtain general estimates of substitution effects. Some studies, rather than using the official manipulations of the tax rate, simply used estimated effective tax rates obtained by regressing benefits on income on a state-by-state basis (see Fraker et al., 1985, and McKinnish et al., 1999 for such estimates). However, these incorrectly linearized the benefit formla and also incorporated taxes and work-related expenses which should not be included.

[26] The above-cited reviews generally surveyed only nonexperimental, econometric evidence on this issue. However, the findings from the NIT experiments are consistent with this result. Generally speaking, comparisons of labor supply across alternative treatment groups which had the same G but different t showed essentially zero net effects of t on labor supply.

AFDC but also Food Stamps, subsidized housing, and the Medicaid program. They showed that cumulative tax rates were generally greater than 100 percent in this case. Nevertheless, while their estimated substitution and income elasticities were sizable, the net effect on labor supply of reducing the marginal tax rates to a level below 100 percent was negligible. Meyer and Rosenbaum (2001) focused on an attempt to explain the increase in employment rates among single mothers from 1984-1986. They found that AFDC benefits and tax rates (the latter affecting potential benefits if working) had expected effects on employment probabilities, but that the time series increase in single mother employment was less affected by changes in those parameters and other welfare variables than a change in the generosity of the Earned Income Tax Credit (EITC) over the period (see the EITC chapter in this volume).[27]

Simple static models of participation in AFDC also form a part of this literature, generally estimating some version of equation (1)-(2) above. Again, most of this literature is summarized by prior reviews. The studies overwhelmingly confirm that participation propensities are positively affected by G and negatively affected by t, and generally confirm that those propensities are negatively affected by W and N. Two of the recent studies (Hoynes (1996) and Keane and Moffitt (1998)) estimated participation equations jointly with labor supply equations and obtained results consistent with these findings.

Researchers have also sought to use this model to explain the time-series pattern of caseload and participation rates in different periods shown in Figure 2. Most explanations for

[27] Because Meyer and Rosenbaum examined employment rather than hours of work, the "perverse" effect of a change in t could not occur. They briefly examined effects on hours of work as a sensitivity test but they noted that the model independent variables were not set up for that dependent variable.

the welfare caseload increase in the late 1960s and early 1970s rely on the gradual expansions of the Food Stamp and Medicaid programs to more counties in the U.S., which, given the ties of these programs to AFDC receipt, made the program more attractive. Such an explanation is consistent with the economic model. However, most observers attribute part of the increase as well to court decisions relaxing eligibility restrictions and to declines in welfare stigma, although the latter may be endogenous. The relatively stable caseload trend in the late 1970s and 1980s is generally attributed to two offsetting and contradictory forces, one an increase in the fraction of single mother families in the population and the other a decline in the participation rate conditional on single motherhood. The latter is most often attributed to the decline in the real benefit level, while the causes of the former are still in considerable dispute. The economic model is better at explaining changes in participation conditional on single motherhood than changes in single motherhood, in general. Finally, the increase in caseloads in the early 1990s, which resulted from a rise in the participation rate conditional on single motherhood more than a rise in single motherhood, is more difficult to explain with the economic model, for neither declining wage rates nor increasing benefits can be reasonably tied to most of the growth. Blank (2001) shows that the majority of the caseload increase over this period arose from increases in child-only cases and the AFDC-UP caseload, neither of which is easily explainable by the economic model, whereas the remaining growth of the traditional single-mother AFDC caseload is reasonably well explained by an expanded model which not only includes benefits but also demographics, political factors, and other policy variables.[28]

[28] Blank also argues, however, that the growth of the single-mother AFDC caseload over this period was more a result of an increase in the number of single mothers with income below the eligibility level than of an increase in takeup conditional on this eligibility. Moffitt (2001)

A small literature has also developed on the concept of welfare stigma, which, as mentioned above, is conceived of as a disutility of welfare participation which lowers participation rates in the program. Moffitt (1983) introduced the concept to the literature but considered it to be an exogenous heterogeneous parameter of the individual utility function which could be used to rationalize the need to estimate a participation equation and not just a labor supply equation.[29] However, other studies have developed the idea of welfare stigma as a disutility which declines with the number of other families who are on welfare, setting up a social interactions, or contagion, model which can have multiplier effects once participation rates exceed a threshold. Besley and Coate (1992a), for example, assumed that the utility of being on welfare is reduced by some function of the fraction of the population that is not truly needy and is instead reducing labor supply to go onto welfare. Lindbeck et al. (1999) simply assumed that the utility of being on welfare is reduced by the number of others who are on welfare, but went on to analyze the voting equilibria that would set benefit levels that would generate different welfare caseloads as an equilibrium outcome. In a somewhat different vein, Nechbya (1999) assumed that the stigma of having nonmarital births (which is a condition for welfare eligibility) is reduced by the magnitude of the aggregate nonmarital birth rate, and then showed that a change in welfare benefits can initiate a nontrivial change in that birth rate through multiplier effects.

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showed that the caseload increase over this period was half a result of increases in the numbers of single mothers and half a result of increases in takeup conditional on single motherhood (but not conditional on income). Moffitt also argued that, over the period 1971-1995, participation rates so defined fluctuated around a constant mean and hence had no effect on the long run growth of the caseload, which is instead essentially entirely explained by the growth in single motherhood.

[29] If participation rates of eligibles are 100 percent, then all individuals are on the boundary of their constraints and their observed values of labor supply uniquely determine their welfare participation status; hence there is no need to estimate a welfare participation equation.

Participation Dynamics

A continuing area of research on the AFDC program focuses on participation dynamics, that is, the study of entry rates, exit rates, and spell distributions of time on AFDC. Interest in this issue arises from several sources. One is the recognition that, contrary to the impression given by the static labor supply model where participation seems to be a one-time, permanent, decision, turnover rates in the AFDC program are quite high. Another is that attitudes toward the program, and policy measures to assist recipients, may differ depending upon whether recipients have only short spells of AFDC receipt or long spells. Short-spell recipients are likely to be those with stronger labor market skills who use the program for temporary support, while long-term recipients are likely to be those with the weakest skills. Further, long-term receipt may reduce skill levels further, as time out of the labor force results in deterioration of skills.

Models. The two building blocks of dynamic participation analysis are an entry rate and and an exit rate. The standard static labor supply-participation model is easily adapted to entry and exit in order to generate a conventional economic model of turnover. Supposing that the relevant population of eligibles is composed of myopic individuals who make decisions only on the basis of current period values, the decision for women who are off welfare at time τ-1 to enter or not enter the program (designate EN_τ as an entry dummy variable) and the decision for women who are on welfare at time τ-1 to exit or not exit the program (designate EX_τ as an exit dummy) can be formulated as:

$$EN_\tau^* = V[W_\tau(1-t), N_\tau(1-t) + G] - V[W_\tau, N_\tau] - C - F1 \qquad (3)$$

$$EN_\tau = 1 \quad \text{iff } EN_\tau^* > 0; \quad EN_\tau = 0 \quad \text{otherwise} \qquad (4)$$

$$EX_\tau^* = V[W_\tau, N_\tau] - V[W_\tau(1-t), N_\tau(1-t) + G] + C - F2 \quad (5)$$

$$EX_\tau = 1 \text{ iff } EX_\tau^*>0; \; EX_\tau=0 \text{ otherwise} \quad (6)$$

where F1 are fixed costs associated with moving onto welfare and F2 are fixed costs associated with moving off welfare (and possibly into the workforce). Starting with initial positions on or off welfare, and with G,t, and C fixed, transitions on and off welfare are driven by fluctuations in private market income opportunities W_τ and N_τ, which are assumed to follow some stochastic process. Individuals leave welfare when good job or other income opportunities arise and enter welfare when those job or income circumstances deteriorate; benefit levels and tax rates affect the relative attractiveness of welfare in the decision.

Given that the utility structure of the entry and exit decisions in (3)-(6) is the same as that in (1), the same comparative statics apply: entry rates are increasing in G and decreasing in t and W, while exit rates are decreasing in G and increasing in t and W. Since labor supply on welfare is always less than labor supply off welfare, we can also say that these entry and exit decisions operate to make labor supply decreasing in G and increasing in t and W. That work incentives are implied to increase in t reflects the adverse work incentive effects noted above, and can be seen in a dynamic context to operate through entry and exit: decreases in marginal tax rates tend to decrease exit from the rolls and increase entry onto the rolls. Although the fixed costs reduce transition rates, an individual's participation will tend to gradually move over time toward welfare if (3) is more positive than (5) conditional on W_τ and N_τ and toward nonwelfare if the opposite occurs.

If μ is the entry probability, λ is the exit probability, and p_τ is the probability of being on

welfare at time τ, then we have the flow identity

$$p_\tau = \mu(1 - p_{\tau-1}) + (1 - \lambda)p_{\tau-1} \qquad (7)$$
$$= \mu + (1 - \mu - \lambda)p_{\tau-1}$$

which approaches the equilibrium value

$$p_\tau = \mu/(\mu+\lambda) \qquad (8)$$

Thus participation on welfare will be more likely if μ is greater than λ and nonwelfare participation will be more likely if λ is greater than μ. Unless the fixed costs are large relative to the utility differences, these participation tendencies will be driven by the relative values of G,t,W, and N, as before.

In this simple setup, short-term recipients can be thought of as those with higher values of mean W_τ and N_τ, which will generate lower entry rates, higher exit rates, and shorter spell lengths, and long-term recipients can be thought of as those with lower mean values of those variables, resulting in higher entry rates, lower exit rates, and longer spell lengths. A logical alternative in this model is that short-termers and long-termers have the same means for wages and nonlabor income, but short-termers have a higher variance, which will lead them to have higher turnover rates as well. If the variation in wage and nonlabor income from period to period, which generates turnover in this model, is not exogenous but rather depends on effort, then it is also possible that short-termers are those who put more effort into job search.

Heterogeneity in the distaste for welfare can also generate differences in turnover rates, as those with greater distaste have a lower reservation wage for going off or failing to enter welfare.

These models can be made more realistic by allowing foresight, particularly if wage growth is made endogenous and allowed to be affected by whether the individual is on or off welfare. Current entry and exit decisions will then be affected by expectations of their future consequences for wages and labor market opportunities. Liquidity constraints are important because those going onto welfare may be those who are more greatly constrained and who cannot sustain themselves off welfare after a negative wage shock, and those on welfare may be discouraged from saving by the asset tests in the program.[30]

Evidence. The empirical literature on participation dynamics has two strands, one consisting of simple descriptive work on the distribution of AFDC spells in the population and of what types of individual characteristics are associated with that distribution, and another consisting of estimates of entry and exit rate equations. The most influential descriptive work in the literature is that of Bane and Ellwood (1983,1994) and Ellwood (1986), who used panel data to estimate distributions of AFDC spell lengths and also distributions of "total time on" AFDC in a fixed calendar interval. These authors realized upon examination of the data not only that turnover rates were high but that many of those who exited the AFDC rolls returned in fairly short order, a finding that has been repeatedly found in subsequent work. This implies that many women do not have many long spells but nevertheless accumulate a considerable amount of time on welfare because of their high return rates. Consequently, they may have a high "total time on" welfare even though they do not have long spells. The data used by Bane and Ellwood

[30] See Hubbard et al. (1995).

indicated that up to one quarter of all (new) recipients would be on AFDC for more than 10 years in the subsequent 25-year period, as compared to only 10 percent who would have a spell that lasted that long.[31]

In their later work (Bane and Ellwood, 1994), the authors took the existence of high reentry rates to extend the categorization of welfare recipients to a three-fold classification, consisting of long-termers, short-termers, and "cyclers." Long-termers have long spells, short-termers have only brief periods of AFDC receipt, and cyclers have relatively short spells but return to the rolls frequently. The authors argued that policy toward the three groups should be different. In a recent paper, Moffitt (forthcoming) has provided evidence, however, that cyclers do not appear to have greater labor market skills than long-termers, which is an implication of the conventional economic model, where high turnover is generated by higher labor market skill. Moffitt found that the education and wage rates of cyclers were equal to those of long-termers, if not lower, and that they are a very disadvantaged group of recipients. This suggests that their cycling on and off for the rolls must be arising from some other kind of behavior, such as an inability to comply with program rules.

The literature on estimating entry and exit equations is fairly large, and is well summarized, for the most part, by the previous reviews of research on AFDC referred to earlier.

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[31] The US Department of Health and Human Services now routinely publishes these total time on figures. A recent report (U.S. DHHS, 2001, Table IND 10) shows that, in a period later than Bane and Ellwood considered and for the total recipient population (not just those with a new spell), one-quarter of recipients were on AFDC more than 5 years in a 10-year period, a much higher rate of dependence. Gottschalk and Moffitt (1994) examined how total-time-on had been trending, however, and found no trend from the 1970s to the 1980s. They also proposed an alternative measure, which was the percentage of income received from AFDC over a fixed calendar period.

Table 7 lists some of the more recent studies that have been conducted, which explore a variety of issues. On the issue of whether AFDC benefits affect the probability of entry and exit, the literature confirms prior work that the guarantee generally decreases exit and increases reentry. None of the studies estimated the effects of the tax rate. Blank and Ruggles (1994) emphasized the high rates of reentry in the program, and Blank and Ruggles (1996) emphasized that spells of eligibility are not the same as spells of welfare receipt, and some women enter the rolls after being eligible for some time and others leave the rolls and remain eligible, usually for unknown reasons. Fitzgerald (1995) and Hoynes (2000) examined the effects of local labor market conditions on exit rates, while Harris (1993, 1996) examined the "routes" to exit from the rolls and reentry to it. The literature on "routes" was initiated to a large exit by Bane and Ellwood (1983), who found that most exits from AFDC were to marriage. Harris (1993, 1996) and others found that this was a result of using annual data, and that when monthly data are used, exits are usually "to" work. The literature on these "routes" on and off welfare and "reasons" for exit are frought with conceptual problems, for the immediate reasons for entry and exit may not be the long run reasons. In addition, reasons that particular individuals enter and exit are endogenous to their unobserved characteristics, and it is difficult, as a result, to draw any implications about whether government policy should be to encourage certain "routes" off welfare. [32]

Employment Programs

In addition to simply providing cash with a specified benefit formula, the AFDC program

[32] In a review of the earlier literature in this subarea, Moffitt (1992a, p.26) noted that the studies needed more theoretical structure and content. This observation would seem still to hold.

has long conducted various types of employment programs for recipients. One type is an education or training program which attempts to provide labor market skills and hence to improve the wage rate of the recipient. In policy discussions, these programs are often termed "human capital" programs. A second type is one which provides assistance in job search, or assists recipients in locating transportation and child care for employment, or even which instruct recipients on the kinds of behavior and dress needed at regular jobs. In policy discussions, these are generally not termed "human capital" programs, but economists' conception of human capital should include them because there is some type of investment, or instruction, involved, which has a future return, however small and short-lived that return might be. A third type is a pure workfare program which simply requires a recipient to work some minimum number of hours per week, without the assistance or other guidance from the welfare department (except, in the case of public service employment, to actually provide the job). Such a program should not be expected to affect the wage rate and is not a human capital program under any definition. Most programs have a least some elements of two or more of these ideal types, and it is not always easy to find any of the types in pure form. Nevertheless, prior to TANF and the pre-PRWORA waiver programs, AFDC employment programs typically drew mostly on elements from the first two of these program types, even though variations on the third were present to some degree.

Models. These programs, when viewed as human capital programs that require an investment of time (in education, training, job search, etc.) and which yield some rate of return in the form of a higher future wage, can be simply analyzed with the standard investment

framework familiar from human capital theory.[33] The value to an individual of participating in the program is the present value of future wage and earnings gains minus the present value of the time costs and, if any, money costs. Here it is important to know whether the program is voluntary or mandatory. If it is voluntary, no recipient will participate in the program unless its net present value is positive, but if it is mandatory, then it is conceivable that the net present value will be negative for some recipients. If so, this will reduce the value of being on welfare and should be subtracted from the welfare benefit itself (or the present value of such benefits) to obtain the value of being on welfare.

There are a number of minor alterations in this familiar model which change things slightly but not in the main. Future gains in earnings must be multiplied by the probability of employment if the latter is less than one, and programs which change only that probability and not wages also have a potentially positive net present value. Second, the rate of return will depend on whether earnings are raised sufficiently to induce the individual to go off welfare altogether; if so, incremental earnings gains go untaxed (by the welfare department), but if not, earnings gains will be taxed at the welfare tax rate t and hence will be reduced. The rhetoric of most education and training programs is that they are intended to move recipients off welfare altogether, but the reality is otherwise (see empirical review below). The phrase "welfare trap" is sometimes used to describe a situation in which a very large rate of return is needed to make the

[33] Although traditional human capital theory presumes the effect of investment to affect the wage rate, a generalized interpretation would allow it to affect employment as well. For example, an investment in teaching a recipient improved job search techniques may lead to a better ability of the recipient to find a job at all, which would affect hours of work and not the wage rate. Although the theoretical discussion here assumes it is the wage rate that is affected, the same model can be extended to include effects on hours of work.

recipient financially better off off welfare--this is particularly likely to occur if there is a notch at the point of going off welfare where tax rates are over 100 percent. Third, if there are opportunity costs in the form of foregone earnings--as in the classic education case of human capital--these foregone earnings will only be W(1-t), not W, and hence will be lower than they would be for such investment off welfare.[34] If the recipient is not working, there is foregone leisure rather than foregone earnings but the former is not taxed.

Assuming that the opportunity cost is in earnings rather than leisure, the net present value of the program in a two-period model can be written as:

$$NPV = -W_1(1-t)I + \frac{1}{1+r}\{P_2\,[(W_2-W_1)(1-t)H_2] + (1-P_2)\,[(W_2-W_1)H_2 - (G - tW_1H_2)]\} \quad (9)$$

where W_1 is the wage if the recipient does not undergo the program, W_2 is the (higher) wage in period two if she does, I is the amount of time required in period one, H_2 is hours worked in period 2, and P_2 is a welfare participation dummy in period two if the recipient undergoes the program.[35] A second equation for the determination of P_2 is required but that is omitted for brevity. The "welfare trap" is illustrated by the last term, which shows that the gain to the program if the recipient goes off welfare subtracts off the lost benefit relative to the earnings gain.

The key empirical questions raised by this model are (1) what effect have past programs

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[34] This point was made long ago by Kesselman (1976). The theoretical literature on the effect of transfer programs on human capital investment is virtually nonexistent. See Kesselman and Miller and Sanders (1997).

[35] The change in H_2 resulting from the increase in the wage is ignored for simplicity.

had on the wage rate or earnings and (2) to what degree have they moved recipients off welfare in subsequent periods.

Moffitt (1996) has noted that there is a third empirical question, which is (3) whether these programs affect the desirability of being on welfare in the first place, which is commonly termed an effect on "entry" into the program.[36] If the program is voluntary, no recipient can be made worse off by its presence and the welfare program can only be enhanced in value, which will increase the caseload by making welfare more attractive. If the program is mandatory, it may reduce the caseload to the extent that recipients or potential recipients see it as making them worse off.

Evidence. The main employment programs in the history of the AFDC program--at least prior to the waiver programs of the 1990s--were the WIN program, the WIN "demonstrations" of the 1980s, and the JOBS program, all referred to in Section II above in the discussion of the history of the AFDC program. As noted there, the WIN program was a work-registration program which provided simple job placement and job search assistance to eligible recipients; the WIN demonstrations tested new employment programs involving "community work experience" (close to workfare)," work supplementation," and heightened job search; and the JOBS program required states to offer some mix of education, job skills training, job search, on the job training, work supplementation, and community work experience.[37]

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[36] This is a slight misnomer given the high turnover in the program. Recipients who are already on welfare but who know that they may be engaged in a program subsequently, may also change their exit decisions given the presence of the program, e.g., whether to accept a job offer off the rolls or not.

[37] "Community work experience" meant workfare because it was usually work at a publicly-created job in the community such as cleaning up public parks. "Work

Neither the WIN demonstrations nor the JOBS program was ever evaluated in a nationally representative sense, that is, by a random sample of all programs around the country or by a universal sample of all programs. Instead, there were a series of evaluations of the programs in selected state and local areas. In both cases, probably enough areas were selected that a reasonably good sense of the effects of different types of programs were obtained. For the WIN program, however, there was one major evaluation, which was national in scope (Ketron, 1980). It used a methodology which is now regarded as undesirable (the use of individuals on waiting lists as a comparison group) and found very modest impacts of the program on recipient earnings, between $200 and $300 per year on average but larger for public service employment.

The results of the WIN demonstration and JOBS evaluations have been reviewed and summarized in several other places (Burtless 1995a, 1995b; Devere et al., 2000; Gueron and Pauly, 1991; Moffitt, 1992a; O'Neill and O'Neill, 1997; Plimpton and Nightingale, 2000; U.S. General Accounting Office, 1999; see also the chapter by LaLonde in this volume). Both the WIN demonstration and JOBS evaluations concentrated on answering the first empirical question noted above, namely, whether there is a positive return to the programs in terms of wage rates and/or earnings, and devoted some attention as well to the second question--whether caseloads were reduced. Virtually no attention was paid to the third question (whether there was induced entry) primarily for methodological reasons, for most of the estimates of program effects were

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supplementation" allowed welfare departments to use welfare benefits to subsidize private sector jobs. See U.S. Congress (1994, Table 10-4) for the programs chosen by the states under the JOBS programs; these usually were job search, on the job training, and community work experience, with sometimes some type of education. Although education was required to be one of the programs offered, states rarely supplied the necessary funds to establish significant programs of that type.

obtained from random assignment trials, and those trials are inherently incapable of estimating entry effects (Moffitt, 1992b).

The results of the evaluations of the WIN demonstration programs show generally positive impacts on employment and earnings, with impacts on the latter usually in the range of $300 to $600 per year. However, some programs had a much smaller impact, close to zero, and others had larger impacts, occasionally around $900 per year. These impacts are not large enough to make a major dent in the poverty rate, but are large enough to make the programs worth considering, especially in light of the view in the 1980s that most employment programs for welfare recipients had no impact at all. Furthermore, the expenditure on the WIN demonstration programs was quite small, around $500 per recipient in some cases, because only a modest amount of services were provided; these were very small scale programs. The earnings impacts are perhaps larger than one might expect from such a minor investment.[38]

On the other hand, another finding from the WIN demonstrations was that the reduction in AFDC participation, caseloads, and in expenditures on AFDC benefits was quite modest. The employment and earnings impacts either were not enough to move recipients over the breakeven point, or not enough to prevent recipients from coming back onto the AFDC rolls in sufficient frequency to keep expenditures from falling.

The evaluations of the JOBS program also have generally yielded positive impacts on employment and earnings. Evaluations of the California GAIN program, the most well-known

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[38] The evaluations also showed that most employment impacts arose from increases in the amount of time employed rather than on the hourly wage rate. This is not too surprising given that the programs made little investment in human capital. However, it also implies that the impacts are likely to fade over time, and, indeed, Friedlander and Burtless (1995) showed that they were gone in most sites after five years.

of the early JOBS evaluations, showed positive earnings gains of $636 (about 25 percent) in the third year after the evaluation began (Riccio et al., 1994). The GAIN evaluation involved six different counties in California, and the results from an evaluation of one of the counties--Riverside--showed especially large earnings gains (almost 50 percent) for reasons that have never been completely resolved, partly because the random assignment methodology involved does not enable any rigorous investigation of mechanisms by which the treatment has an effect. Speculation has been that the Riverside program was so successful because it offered a particularly strong "work first" program that emphasized immediate job placement through job search (though others believe it had a good mix of rapid-employment job search and human-capital education and training); because the labor market in Riverside was relatively weak and hence control families did not do well; and even that the results were due to a charismatic and energetic director. Whatever the reason, the Riverside evaluation has come to be one of the genuine success stories of employment programs in the 1990s.

One of the problems with evaluations which this illustrates is that conducting experimental tests of a program in only a handful of areas, and allowing each area to offer a different variation on the general program, essentially prevents learning whether differential effects that occur across areas are the result of site-specific factors (the economy, charismatic directors, etc) or of the particular program that was tested in the area. Hotz et al. (2000) compared different sites in the GAIN evaluation to determine if the different impacts across sites could be ascribed instead to differences in the types of recipients enrolled in each site; they found that such differences did not explain the cross-site differences. Greenberg et al. (2001) ran regressions of the estimated program effects in each of several JOBS sites on characteristics of

the area, the sample, and the program, and found it impossible to explain the cross-site differences. This makes it difficult to use the results for policy because extrapolation to the nation as a whole or to any other particular area around the country is very problematic.

A JOBS evaluation involving 11 different sites has also yielded results but is still in progress at this writing.[39] A unique aspect of this evaluation was that it tested different program strategies within the same sites, thus eliminating some of the site effects just described. For the most part, the variation of interest was whether the program tested a rapid-employment, low-cost job search program, or a human-capital, high-cost, education and training program. The distinction is important because the TANF program which replaced AFDC emphasized the former over the latter, as part of the Work First philosophy (this was also an issue in the Riverside GAIN program, as just noted). The results to date indicate that, four years after the evaluation began, positive employment and earnings gains resulted, falling generally in the range of $300 to $500 per year (Freedman, 2000). Both rapid-employment and human capital programs were found in this range, although some of the human capital programs yielded results which were lower. The trend in impacts after three years suggests that the rapid-employment programs have large initial impacts which fade over time, while the human-capital programs have impacts that do not decline as fast or may even grow over time, and that the earnings and employment gains end up by the third year not far different (Bloom and Michalopoulos, 2001).[40]

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[39] The evaluation began in the early 1990s, and results from a five-year followup measuring impacts have not yet been completed.

[40] In a study of the earlier GAIN program which followed recipients 9 years after enrollment, Hotz et al. (2000) found the same pattern when comparing treatment effects in different counties--those with rapid-employment programs had impacts which faded over time compared to those emphasizing education, and after 9 years they were statistically no different

This has led some observers to conclude that the two strategies yield about the same impacts.[41] If the two have the same impacts then, because the human capital strategy is more expensive than the job-search strategy (up to double by some estimates), the former must necessarily have a lower rate of return than the latter.

Another important finding from this JOBS evaluation was that, while earnings impacts of the programs were positive, household income changed very little as a result of the program. This occurred because the increases in earnings were mostly cancelled out by declines in welfare benefits. This implies that recipients would have very little incentive themselves to engage in these programs, unless they expected greater gains in the future than were measured by the evaluation. This suggests that the programs would have to be mandatory in order for the welfare departments to induce recipients to enroll in them.

While the overall sense of the JOBS evaluations is that there are indeed employment and earnings gains from these programs, both inherent problems and practical problems with the random-assignment methodology limit what has been learned. Aside from the difficulty of

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from each other.

[41] A later analysis (Bloom and Michalopoulos, 2001) concluded that "mixed" strategies were best, rather than a pure rapid-employment or pure human capital strategy. This conclusion was based largely on comparing pure strategies in this JOBS evaluation with several of the earlier GAIN evaluations, which were characterized as "mixed" as well--with a dominant emphasis on one strategy but with elements of the other. The only JOBS evaluation with such a mixed strategy was tested in one site (Portland) which stood out from the rest and had above-average impacts. Portland was initially known as a rapid-employment program city, but in fact it offered some education and training to certain recipients. Perhaps more important, it offered individualized treatments to different types of individuals after assessing their needs. There were other differences in the program operated in Portland as well, together with differences in its local economic environment from those in the other cities. Unfortunately, as with the Riverside GAIN program, it is almost impossible to determine what the true reason for the difference in impacts in Portland was.

incorporating entry effects and separating site effects from treatment effects, as already noted, many of the programs allowed control group members to start receiving the program after 3 or so years. Thus impact estimates beyond that period are not true estimates of the program by itself. In addition, in many of the areas the local program environment continued to change after the evaluation was initiated, further affecting the outcomes of experimentals and controls.

Family Structure

Models. The suggestion that the AFDC program encourages women to have children out-of-wedlock has been a staple of popular views of welfare for decades. This popular view is consistent with the fact AFDC benefits are primarily provided only to single-parent families and those are virtually all families with a female single parent. This view has been addressed by a large volume of research by economists in the last fifteen or so years, and by a smaller volume of work by demographers in prior years. It has been accompanied by a more expansive examination of the effects of AFDC on family structure in general, including not only its effects on whether a women is a single mother, but also on cohabitation, child-bearing, and whether a woman lives with her parents or other relatives.

Virtually any economic model of marriage, including Beckerian utility-differences, or gains-to-marriage, models, predicts that the offer of a benefit to an individual contingent entirely on whether he or she is unmarried and has children will induce behavior which leads to a higher incidence of such events. One theoretical framework that would predict the opposite is one in which marriage is entered into voluntarily but that marital dissolution is an exogenous event. In this case, single motherhood is in part an unlucky random outcome of marriage that should in

principle be insured, and AFDC is a form of public insurance which plays that role. The presence of such insurance should, therefore, encourage individuals to take the risky action, namely, to enter into marriage, to a greater degree than they would in the absence of insurance. However, the moral hazard problem is severe, for individuals can clearly exert much control over becoming a single mother and, further, much single motherhood takes place prior to marriage. This makes insurance forces unlikely to change the net direction of effect of AFDC.

The precise rules of the AFDC program, and its two-parent counterpart, the AFDC-UP program, complicate the incentives in several respects (Moffitt et al., 1995). Because eligibility for AFDC is based on the deprivation of the support of a biological parent, a woman who marries a man who is not the father of her children, or who cohabits with a man who is similarly not the biological parent, is eligible for AFDC. Thus AFDC does not discourage marriage or cohabitation universally but only if it is with the male who is the children's actual father. If a woman does marry or cohabit with a non-biological male, and that male provides financial support to the children, the income will be counted in full or in part against the grant and it is possible that the woman in question may end up financially ineligible for the program. However, at least for cohabitation, enforcing this provision is difficult. On the other hand, the AFDC-UP program does provide some outlet, for it provides benefits not only to families where both biological parents are married, but also where they cohabit; eligibility is only based on the presence of both parents, not on the presence of a legal union. However, the eligibility provisions in AFDC-UP have been sufficiently strict historically that it is more difficult to qualify for benefits under it than under AFDC, so the incentives for a woman against joining up with the father of her children is still quite strong.

The literature on the effects of AFDC on marriage has a parallel in models of the effect of the income tax, and of the Earned Income Tax Credit, in creating marriage disincentives (for the latter, see the paper by Hotz and Scholtz in this volume). That literature is instructive because it demonstrates that even if AFDC benefits were provided to married couples (or unmarried biological parents), there would still be a potential for incentives for or against marriage. If the unit of taxation is the family, then married couples are more likely to be above the income eligibility point--assuming both male and female have income--than if they are separate, to take just one example. As the taxation literature demonstrates, the only neutral program that does not distort private incentives is one in which benefits are paid entirely on an individual basis. But then such a program would violate vertical equity considerations and would also be complicated by the presence of children. As Hotz and Scholz note, a tax or benefit system cannot simultaneously be progressive, treat the family as the unit of taxation, and be neutral with respect to marriage (see also Alm et al., 1999).

Another theoretical observation worth noting in this context is that a universal benefit system which provides nonzero benefits to all household structures--in particular, to single individuals--could alter predictions of the effect of AFDC on marriage. If the AFDC system were altered so as to allow benefits to be paid to both married couples and single individuals, then some marriages would dissolve so that the single individual--most often the male--could collect the benefits for which he is newly eligible. In addition, some currently single mothers and absent fathers would choose not to marry despite the new benefits they could obtain from that action because the absent father would now also receive increased income. These effects would have to be counted against the marriage-increasing results of the program change, with

unknown, and therefore ambiguous, net effect.

The AFDC program alters incentives for childbearing and living arrangements as well. With regard to childbearing, the effect is through the route of single motherhood, for childbearing outside of marriage makes a mother eligible for benefits whereas childbearing inside marriage generally does not. An additional incentive for childbearing appears in the benefit structure in states in which benefits are calibrated to family size and higher benefits are paid to larger families. In this case there is an income gain to having additional children that is not present in the absence of a government welfare program, and hence distorts choices in that direction. Living arrangements refer generally to whether a single mother lives with others, either her parents or a cohabiting male. The rules governing cohabitation have already been discussed, and it is only necessary to note that living with parents is governed by the same rules. That is, living with parents does not alter the basic eligibility condition based on the absence of a biological parent, and will affect the grant only if the parents provide financial support to the mother or child. However, because that type of support is more verifiable than support from a cohabiting male, states are more likely to reduce the benefit in this case. The less-than-full taxation of parental support provides an incentive for a woman to live with her parents, as noted by Hutchens et al. (1989). The fact that support is partly taxed provides a disincentive for a woman to live with her parents relative to a family-structure-neutral system in which the AFDC benefit is not affected by this type of family structure. This provides another example of the tradeoffs noted above that always come up in balancing equity with neutrality in tax and transfer systems.

Evidence. There has been built up in recent years a fairly large literature on the effect of

AFDC benefits on family structure, mostly concerned with the effects of benefits on the probability of being a single mother. The literature has been reviewed many times, but the most recent review is by Moffitt (1998), who reviewed 68 separate estimates of the effect of AFDC on various aspects of marriage, fertility, and single motherhood. His review covered studies conducted through approximately 1996. The results of his survey are shown in Table 8, which reports counts of estimates showing insignificant, significant, or a mixture of insignificant and significant effects of welfare. The results are broken out by race, when possible, and by the source of variation in benefits used to identify welfare effects--either cross-state variation in benefit levels, cross-state changes in benefits (i.e., state fixed effects models), within-state variation assuming some determinant of benefits does not simultaneously directly affect family structure, or pure time series studies. Overall, while there is a very slight excess of significant estimates over insignificant ones across all races, it is quite small. However, the patterns differ by race and source of benefit variation, with stronger effects appearing for white women, and for white women using cross-state levels and for black women using cross-state changes in benefits. The difference in how benefit variation affects family structure between the two races is a result of a different sorting of single mothers by state for the two races, with white single mothers tending to be concentrated in high-benefit states but black single mothers tending to be concentrated in low benefit states.

Nevertheless, the most important implication of the review is that none of the significant estimates were in the 'wrong' direction--all were in the 'expected' direction (positive on single motherhood, negative on marriage, etc). A simple unweighted average of the estimates would, therefore, reveals a central tendency suggesting the presence of an effect of welfare benefits on

family structure. Moreover, when distinctions are made between the studies by the likely credibility of the estimates--those controlling for the most other variables, which concentrate on the most appropriate part of the distribution of women, and use the most careful econometric methods--effects are sometimes stronger, sometimes substantially so (Moffitt, 1998). Therefore, while there is still considerable uncertainty in the literature and there remain a large number of studies reporting insignificant estimates, this reading of the literature leads to the conclusion that welfare is likely to have some effect on family structure.[42]

There have been a few newer studies not included in the review just described. One of particular note is that of Hoffman and Foster (2000), who were able to replicate a study of Rosenzweig (1999) using Michigan Panel Study of Income Dynamics data, finding significant effects of welfare on nonmarital fertility albeit only in certain age ranges. Foster and Hoffman (2001) conducted another study with the National Longitudinal Survey of Youth and found, as have many prior studies, that welfare impacts are greatly reduced when state fixed effects are added to the model. Blau et al. (2000) use microdata from the 1970, 1980, and 1990 Censuses to estimate metropolitan-area fixed effects models of the effect of AFDC benefits on marriage rates and find them to have no statistically significant effect in their preferred models.

An issue in the literature has been that real AFDC benefits have declined over time while single motherhood rates have increased, suggesting that benefits could not have caused the rise in headship. Nechyba (1999) constructs a theoretical model in which social interactions between

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[42] This is a slight change from the author's earlier reading of the literature (Moffitt, 1992a). As discussed in Moffitt (1998), the magnitude of the effect is more uncertain than the existence of an effect. Estimates range from quite small effects to rather large ones. The difference is not easily explainable by the preferred study characteristics just mentioned, and is consequently not currently resolved.

low income families causes lags in the response to a change in benefits, consistent with the hypothesis that rising welfare benefits in the late 1960s and early 1970s could have had lagged effects over the next two decades (a hypothesis also suggested by Murray (1984)). Moffitt (2000) takes a more direct approach and conducts a time series analysis of the relative importance of trends in female wages, male wages, and welfare benefits, and finds that a decline in the wages of less educated males was the main contributor to the rise in female headship, and that the decline in welfare benefits slowed that rise, thus providing one possible reconciliation between the cross-sectional and time-series evidence.

The living arrangements literature has examined the effects of welfare on the propensity of a single mother to live with her parents, and on her propensity to cohabit. Ellwood and Bane (1985) found that higher AFDC benefits were associated with greater propensities for single mothers to live independently of parents, while Hutchens et al. (1989) argued that the proper variable is the relative benefit between living with and without parents--equal to the benefit penalty imposed for living with parents--and found it to have a statistically significant effect on the propensity to live independently. Hu (2001) found that the probability that a teenager in a welfare family leaves the household is inversely related to the size of the benefit reduction suffered by the parent if the teen were to leave. Moffitt et al. (1998a) found cohabitation rates to be very high among AFDC recipients, but their econometric model did not turn up any strong effects of benefits, or state rules governing cohabitation, on the likelihood of cohabiting. Evenhouse and Reilly (1999), examining the issue with the Survey of Income and Program Participation,find stronger effects of benefits, however, on the likelihood of cohabiting with a male who is not the natural parent of the children.

State Benefit Determination

Models. A final area of considerable economic research has been on the determinants of state benefit level and on the effects of federal matching grants on the level of state benefits. The models used in this literature for state benefit determination are generally drawn straight from the literature on median voter models of public choice, considering aid to the poor as a positive argument in that voter's utility function but with the taxes needed to pay for those benefits to be a negative argument. Income effects are generally assumed to be positive, with higher median voter income leading to greater benefit levels. In the typical model, assuming a head tax on all voters to finance benefits, the price of benefits is equal to the per capita caseload times one minus the federal matching rate. Thus higher caseloads imply that the cost of a dollar increase in the benefit level are more costly, and a lower matching rate implies the same. Lower matching rates, assuming they are partially spent on tax relief or other public goods, have some "leakage" because a dollar of grant does not translate into an extra dollar of welfare expenditure. For many years the matching rate structure of the federal subsidy formula for AFDC was progressive, with higher matching rates at low benefit levels than at high benefit levels, thus indirectly encouraging a reduction in the dispersion of benefit levels across different states. However, this structure was gradually replaced over the 1970s by a simple constant proportional matching rate, regardless of the level of the state benefit, in an open-ended match at that rate.

Evidence. One focus of the empirical literature has been to estimate price and income elasticities for benefits, usually from a regression of benefit levels on state median income and on a price variable, usually constructed as the caseload times one minus the matching rate, as just

discussed.[43] There are several econometric issues that arise in such estimation which will not be discussed in detail here. The first model of this type was conducted by Orr (1976), who found that the federal matching rate, state per capita income, and other variables measuring the characteristics of the taxpaying population and the recipient population all had effects on a state's chosen benefit. Orr concluded that the results were generally supportive of a public choice view of state benefit determination. A number of additional studies were conducted thereafter and a range of price and income elasticities obtained. Ribar and Wilhelm (1999) have surveyed the estimates, and conclude that price elasticities are of the correct sign but weak in significance and relatively small in magnitude--in the range (-.14, .02)--in contrast to income effects, which are generally significantly positive and somewhat larger in size--in the range (.11, .82). Chernick (1998) also reviews the evidence and argues that the price elasticities of changing the matching rate are somewhat greater than this. Baicker (2001) uses a different estimation strategy and obtains yet higher price elasticities.

A puzzle that has garnered additional attention are the reasons for the long-term decline in real AFDC benefits over the 1970s and 1980s. Neither changes in matching rates nor in income can explain the decline; in fact, real income growth should have led to an increase in benefits. Several hypotheses have been suggested, including that AFDC benefits were replaced by Food Stamp and, possibly, Medicaid benefits in the voter's utility function, or simply that voters preferences shifted. Shifts in the nature of the caseload, from divorced women to unmarried mothers, has also been posited to be partly responsible for the trend. Others have

[43] There are a number of issues in using aggregate state median income to proxy the income of the median voter, and also whether median income itself identifies the median preference voter. See Moffitt et al. (1998b) for a discussion.

suggested that the decline in real wages for low-skilled workers led to an increase in the price of redistribution as well as an increase in "distance" from the median voter, both leading to a decline in the desire for redistribution. No consensus has emerged in the literature on the reasons for the change.[44]

IV. Research on the TANF Program

Research on the TANF program is much smaller in volume than that on AFDC, not only because TANF has been in existence for a shorter period but also because economists and other researchers have encountered many difficulties in studying the program which were not present, at least to the same degree, for the AFDC program. Estimating the overall impact--that is, the combined effect of all individual component changes--of the transition from AFDC to TANF, for example, is hampered by the fact that it was introduced in all states at approximately the same time. This is a traditional problem in studying the effects of national legislation which introduces a program simultaneously in all states and areas.[45] A second problem is that cross-state variation under TANF is much more complex than it was under AFDC, for in the AFDC environment most state programs were of the same general type--because they were required to

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[44] See Orr (1979) and Gramlich (1982) for two early contributions, and Moffitt et al. (1998b) for a recent one. See Chernick (1998) for some discussions of the issues and a review of the literature and Moffitt (1999b) for a discussion of the implications of this literature for explaining the 1996 welfare legislation.

[45] As will be noted below, some of the pre-TANF AFDC waiver programs discussed in Section II above have, however, been used in an attempt to estimate TANF effects. Also, not all states implemented their TANF programs at exactly the same time.

be so by federal regulation--and hence differences could be characterized by differing levels of only a few simple parameters (the guarantee, tax rate, etc). Under TANF, each state has freedom under the block grant to develop programs that differ from those in other states in dozens of ways. States have taken advantage of this freedom to tailor their programs individually in myriad ways, with the result that there are more than 51 dimensions by which state programs differ, leaving no degrees of freedom to estimate their effects. A related problem is that each dimension is itself quite complex and difficult to measure; for example, the way a simple concept such as time limits is implemented can vary tremendously by the number and types of exemptions and extensions granted, whether the state allows the "clock" to stop temporarily for families, and so on. Documentation of these differences across states has also been spotty, at times, and this has also limited research.

In what follows, the discussion will first consider models of behavior under TANF, and will then consider evidence on those behaviors as well as any other TANF issues that have been discussed.

Models. Many of the features of TANF can be understood as variations in parameters that were present in the simple AFDC models discussed earlier, with equivalent predictions. Among these are reductions in welfare tax rates which, as noted previously, should increase the employment rate of women initially on welfare but which has ambiguous effects on overall labor supply including initial ineligibles. Another is the imposition of family caps, which reduce or eliminate the increase in benefits ordinarily provided by the presence of additional births; this represents a simple change in the relationship of the guarantee level to family size, with expected effects both on welfare participation and the birth rate. A third are the provisions which make

minor mothers ineligible for benefits is they live apart from their parents, which, as the living arrangements literature in AFDC makes clear, should be expected to reduce the incidence of such living apart.

There are three new features of TANF whose effects are not directly apparent in the simple AFDC models discussed previously. These are work requirements, time limits, and, to some extent, the increase in general costs of welfare participation through provisions for diversion, numerous requirements for continued participation, and informal pressure on women to leave the welfare rolls. Each of these three will be discussed in turn.

Work requirements can, at one level, be easily incorporated in the standard static labor supply model, for they can be modeled simply as a requirement that a recipient work some minimum number of hours. As illustrated in Figure 8, where H_{min} is the minium required work hours, the portion of the welfare constraint CJ is eliminated by the requirement. An individual initially at C (work requirements are aimed at nonworkers) will move either to J (Arrow 3) or to segment AK (Arrow 2)--increasing labor supply in either case--or to point A (Arrow 1), remaining as a nonworker.[46] The caseload and participation rate in welfare both fall, as do expenditures on benefits, and average hours of work rise. If H_{min} falls to the left of the hours corresponding to point D, the work requirement is equivalent to eliminating welfare completely. Holding H_{min} fixed, this is more likely in low-guarantee states, and has been shown to hold for some recipients in those states with sufficiently high hourly wage rates and using the official hours work requirements in PRWORA.

Although work requirements achieve the goals of increased labor supply and reduced

[46] The latter is more realistic is N is positive.

caseloads, they do so by redefining the underlying goals of the program. Work requirements achieve work incentives by giving up on the original negative income tax goal of achieving work incentives at the same time as providing support to those who "cannot" work in a single, integrated system which provides a guarantee to all families with no questions asked. Welfare programs with work requirements at their center must instead predefine those who "can" work and those who "cannot" work; the former are provided with the benefit formula illustrated in Figure 8 and the latter are simply given G, or possibly G plus a low tax rate as an encouragement to work even a small numbers of hours. Because making the separation of the population--or "categorization"--into those who can and cannot work is fraught with practical as well as conceptual problems, the desirability of work requirements depends upon the magnitude of the costs incurred by whatever system of categorization is implemented.

There have been two strands of research on these issues. One dates from the late 1960s and early 1970s, during debates over the negative income tax. Categorical systems were heavily criticized by economists at that time for a variety of reasons. One was that the administrative difficulty in assigning recipients to categories is too great, and, more generally, because economists tend to believe that everyone can work, at least some amount, at some wage and with some kind of work support; that is, the variation in individual ability is continuous rather than discrete. Another was that, because true ability to work is partly unobserved by the policy maker, work requirement systems provide individuals with incentives to switch categories by altering, to the extent possible, the observable characteristics that the government uses to assign recipients to different categories. Yet another was that, because work requirements necessarily involve individual-specific judgements on ability to work, they would result in excessive

caseworker discretion and consequent inequitable treatment across individuals.[47]

The second strand of literature examines the possible optimality of work requirements in various models of optimal taxation. Akerlof (1978) showed that if individuals can be "tagged" as nonemployable, they can be given a greater G and lower t than they could under a noncategorical negative income tax. He, and others in this literature, directly dealt with the incentive problem to change categories by requiring that an incentive compatibility constraint be set that would discourage such behavior. Besley and Coate (1992b, 1995) showed that, under a different optimization criterion, workfare can be used as a screening device to ensure that higher-wage individuals do not take advantage of the program. In this rather different justification for work requirements, all recipients must undergo the cost of complying with work requirements, but benefits can be higher because high-wage individuals have been screened out. This literature is continuing with further refinements and special cases.[48] For the most part, it assumes away the implementation problems that the critiques from the late 1960s and early 1970s made central by assuming perfect tagging. When this assumption is relaxed, and a system of imperfect tagging is considered, however, it can still be shown that some categorization may be preferred although, given the chance of error in the grouping, some positive G should be assigned to all

[47] See Barth and Greenberg (1971), Browning (1975), Lurie (1975) for examples of these early critiques of work-requirement systems as compared to a negative income tax. Barth and Greenberg note that the drawbacks to a system that requires separating the employable and nonemployable was a principle criticism of the AFDC program as it existed in the 1960s.

[48] See Beaudry and Blackorby (1998) and Chone and Laroque (2001) for two recent contributions, for example.

groups, although a smaller one to the 'untagged' group than to the 'tagged' group.[49] Necessarily, these models assume that some fraction of individuals will bear an unwanted cost because they either have to comply with work requirements and hence have their utility lowered or they are screened out when they should be screened in. However, this is regarded as a possibly optimal second-best solution given that true ability to work, or preferences to work, are unobserved by the government.

The 1996 legislation has made these issues of renewed importance. PRWORA requires states to more rigorously enforce work requirements by regularly assessing benefit penalties (called "sanctions") on those who do not comply with the requirements, i.e., those who work less than H_{min}. Indeed, to some extent the most important work-related feature in the legislation was the requirement that states, for the first time, actually enforce the benefit reductions that Figure 8 portrays. Within the federal guidelines, states now have much more freedom to assess sanctions than they did under the AFDC program, and many have adopted very stringent sanction policies.[50] The federal government has also tightened up the definition of H_{min}, setting specific values for it such as 20 hours per week for single mothers with children under 6, for example. States are allowed to exempt families from the work requirement (e.g., women who are ill or

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[49] See Parsons (1996) for an analysis, albeit in the context of social insurance programs, of the consequences for these models of assuming "two-sided" error, i.e., that some tagged individuals can indeed work as well as that some untagged individuals cannot work. See also Immonen et al. (1998).

[50] For example, as noted previously, in Georgia, two violations result in a lifetime ban on welfare receipt. Lurie (2001, p.4), in a study of implementation of sanctions in local welfare offices, notes as well that discretion in using sanctions is widespread and inevitable: "While states decide the amount of the sanctions, the decision to impose or lift a sanction is inevitably at the discretion of the frontline worker."

incapacitated, elderly, pregnant, or have a children under 1 year), which can be interpreted as the assignment of families to the "cannot work" status. However, the federal legislation also sets numerical minimums on the fraction of a state's recipients that must be engaged in a work activity and most of these exempt families are not excluded from the denominator of the ratio.

Time limits are a relatively new programmatic feature and have yet to be subjected to much economic analysis. In one sense time limits require no new models because they simply eliminate welfare after some point and this necessarily moves the individual to the nonwelfare constraint in Figure 5, thereby increasing labor supply and decreasing the welfare caseload. However, the dynamics of this response could be fairly complex if welfare recipients anticipate the onset of time limits and alter their behavior before hitting the limit. For example, similar to behavior that has been found for the response to unemployment benefits with a fixed exhaustion point, welfare recipients may begin to leave welfare prior to the time limit date and their leaving rates may accelerate as the time limit approaches. In the UI case, this behavior is generally explained by the randomness of wage offers and the desire to accept an attractive offer when it arrives even if it does so somewhat in advance of the benefit exhaustion date. The same may apply for welfare recipients approaching a time limit. A more complex response can occur if recipients "bank" their benefits by going off the rolls during good (labor market) times and saving their benefits for bad times (downturn in labor market, unexpected negative income shock, etc).[51] Whatever the model, time limits will tend to increase labor supply and reduce welfare participation and the caseload.

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[51] A few states have programs which allow recipients to receive benefits for a maximum of x years out of every y years, y>x. This would set up cyclical welfare participation response as well as banking within the y interval.

The implementation of time limits in the states has been far from this textbook portrayal. Many states have made liberal use of exemptions and extensions from time limits, resulting in many fewer families hitting the limits than anticipated. In many cases these exemptions and extensions are granted at the discretion of individual caseworkers and local welfare offices, who make subjective judgements on whether recipients have made a good faith effort to find work. Other states have put in place programs funded out of state revenues which will support families after they exhaust their benefits, although sometimes at a reduced level and sometimes only for the children. Still other states stop the "clock" from ticking if the recipient works more than a specified number of hours of work, if the recipient has not been offered a job training slot, or under other conditions. At this writing, many fewer families have exhausted their benefits than anticipated for all these reasons as well as because so many families have left the rolls; the latter could be either because of the favorable economy or from banking behavior. However, despite these factors, in the long run the time limit will bind on more families if they are kept in place.

Finally, the numerous additional costs and penalties which have been imposed on welfare participation have resulted in many more "involuntary" terminations under TANF than were present under AFDC. Indeed, it is no longer clear that a simple voluntary model of welfare participation--even one with work requirements and time limits added to the model--adequately describes reality. Diversion programs and related devices to discourage women who apply for the rules can still be retained in a voluntary model but one in which the cost of application is much higher than before, discouraging application. The cost of being on welfare even after applying and being accepted is also raised by the many rules that TANF recipients must obey, ranging from mandatory attendance at meetings with caseworkers, to compliance with child

support enforcement, to requirements for school attendance (minor TANF mothers without a high degree only), to requirements that children of the TANF mother have regular school attendace, receive immunization shots, or have health exams. Failure to comply with any of these rules carries a penalty which may either reduce benefits or even terminate the families from the rolls. Finally, much anecdotal evidence suggests that welfare departments have exercised discretion to push women off welfare by using administrative devices to end eligibility. These administrative terminations were thought to be present in the AFDC program but are now much more common. This should probably be modeled as a random involuntary termination rate from the program.

Evidence on TANF and pre-TANF Waiver Reforms As noted previously, the volume of research on TANF is necessarily much less than that for the AFDC program. In addition, the largest volume of data analysis conducted on TANF is descriptive in nature and does not seek to estimate the effect of the 1996 legislation in a causal sense, i.e., the effect of the legislation on outcomes relative to what would have happened if the law had not been passed. The descriptive literature, for example, has demonstrated that poverty rates have mostly fallen since 1996, the TANF caseload has dropped by over 50 percent since 1994, women who have left the TANF rolls have employment rates of approximately 60 percent, and there is a lower tail of the single mother income distribution whose income has fallen since 1996. Separating the PRWORA contribution to these outcomes from the effects of general trends, the improving economy, and other programmatic developments (e.g., EITC and Medicaid expansions) is not attempted. The

review to follow will instead discuss only on studies that attempt to make causal inferences.[52]

Studies that have estimated the overall impact of welfare reform in the 1990s--that is, the effect of all the individual components combined--on the main economic and welfare outcomes are listed in Table 9.[53] The first section of the table lists studies of the pre-1996 waiver reforms, most of which made use of the variation induced by different state timing of the introduction of reforms to estimate effects. With a few exceptions, the studies show waivers to have had positive effects on most measures of labor supply and negative effects on measures of AFDC participation, as expected. These studies all control for the state of the economy, usually by controlling for the unemployment rate, so the estimated effects of welfare reform are all intended to be net of the strong economy.

Two exceptions to the results are Bartik and Ebert (1999) and Ziliak et al. (2000) who find very little effect of welfare reform, net of the economy, on the size of the AFDC caseload. The main difference between these two studies and the others is that these two enter the lagged AFDC caseload into the regression model. The reduction in the estimated size of the effect of welfare reform is an indirect sign that states that implemented reforms had above-average caseloads and that caseloads regressed to the mean thereafter, causing a spuriously-estimated decline in the caseload in the studies which omit this lag. A debate has ensued over the econometric properties of including lagged dependent variables in the models in question, which

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[52] See Moffitt and Ver Ploeg (2001) for a list of all types of studies that have been conducted on TANF as of approximately Spring 2001, including descriptive studies.

[53] A number of studies are excluded from the table, including those conducted on a single state but which were not random assignment, and a number of random assigment studies which were discontinued or which have not produced results (Harvey et al., 2000, has a comprehensive list).

has not yet been resolved.[54]

Two entries in Table 9 are for experiments which made use of traditional random-assignment methods rather than cross-state variation in the presence of reform. These studies generally also find positive effects on employment and earnings and negative effects on welfare participation.[55] However, random-assignment methods are not well-suited for major structural reforms like the pre-1996 welfare waivers--or for TANF itself--because such structural reforms tend to cause changes in local labor markets and local communities that feed back onto the control group, and because structural reforms tend to have significant effects on entry into welfare. Experiments produce biased estimates of total reform effects under these circumstances.[56]

The more important policy issue is the effect of TANF, for the welfare waivers fell far short of the major restructuring which occurred after 1996 and hence cannot be taken as predictive of the effects of TANF. Unfortunately, estimating TANF effects is more difficult than estimating the effects of waivers because the vast majority of the states more or less

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[54] Klerman and Haider (2001) demonstrate that building up an aggregate caseload model from a more fundamental set of entry and exit equations will necessarily result in the need for lags in the aggregate model. However, they argue that the caseload model which results from this aggregation is easily misspecified because of duration dependence and other properties of the underlying dynamic model.

[55] There have been many more random-assignment studies in this period but those listed in Table 9 are those which had the main features of PRWORA, namely, time limits, work requirements, sanctions, and enhanced earnings disregards, and which made these reforms within the AFDC system rather than outside of it.

[56] Another difficulty in the use of experiments for evaluating structural welfare reform is that the control group is often contaminated by the general atmosphere of reform which changes the expectations of the eligible population as a whole.

implemented TANF at the same time, leaving no cross-state variation in the timing of introduction to use for estimation. Two studies made use of the fact that four or five states actually implemented reforms somewhat later than the rest of the states, but this source of variation is unlikely to be reliable because there may have been unique differences between those states and the others which were correlated with their late implementation. Most studies have, instead, used difference-in-difference methods which compare trends in outcomes for low-wage or less-educated single mothers to trends in outcomes of various other groups (high wage or highly educated single mothers, or women who are not single mothers) to assess the effect of welfare reform. As Ellwood (2000) and Schoeni and Blank (2000) note, use of these methods is particularly problematic when other reforms, such as the EITC, were occurring roughly simultaneously, and when business cycle and economy-wide trends were occurring which could affect different groups differently. Ellwood concludes that these difficulties are sufficiently severe that the separate contributions of welfare reform, the EITC, and the economy cannot be identified. The only remaining studies in the table (excluding Wallace and Blank (1999), which uses pure time series variation) are McKernan et al. (2000) and Schoeni and Blank (2000), one of which finds TANF to have increased employment while the other finds it not to have done so but to have affected family earnings, income, and AFDC participation. The two studies used different control groups so this may be the source of the difference. What evidence there is, therefore, indicates some TANF effects in the expected direction but the small number of studies and problems in statistical inference make the conclusions rather uncertain.

There have also been a number of studies which have attempted to estimate the separate effects of different components of pre-1996 waiver reforms or of TANF, such as time limits,

work requirements, sanctions, earnings disregards, and the like. Unfortunately, the results from these studies have been inconsistent with each other, often providing opposite-signed effects, have generated many insignificant effects, and have generally yielded an uninterpretable set of findings.[57] There are many likely reasons for this pattern, including the enormous proliferation of different policies across the states and the difficulty in accurately characterizing those differences with a few simple variables; inherent difficulty in separating the effects of one component from another when they no doubt strongly interact; differences in the official characterization of policies from those implemented in practice; and lack of statistical power in the data to detect reasonable-sized effects. For whatever reason, despite the potential of PRWORA to yield cross-state variation in policies usable for research, very little is known about the effects of the separate components of PRWORA.[58]

There has been some research as well on the impact of pre-1996 waivers and TANF on demographic outcomes such as marriage, fertility, and living arrangements. The direction of impact of reform on marriage and fertility is ambiguous at the simplest level, for while a reduction in the caseload and generosity of a program which mainly supports one-parent families should have positive effects on marriage and negative effects on child-bearing, an increase in women's employment should have the opposite effects, as demonstrated by a large empirical

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[57] See Bell (2001) for a discussion of the results with caseloads as a dependent variable.

[58] In addition, with a few exceptions, there have been no random-assignment evaluations which have varied each feature of reform individually, while holding all the other features fixed, even though this is possible in principle in an experiment. It should also be noted that Grogger (2000, 2001) has attempted to estimate the independent effects of time limits by using age variation in children combined with assumptions that that variation does not interact identically with other welfare reform features. The validity of the assumptions needed for these methods to be valid is unknown.

literature on the effect of female wages and labor supply on marriage and fertility. In addition to these broad factors, TANF allows states to impose family caps (restrictions on additional benefits from extra births while on welfare) and denies benefits to minor mothers who wish to live apart from their families, both of which should be expected to have direct effects on family structure.

The evidence to date on the presence of an effect of welfare reform has a whole on these outcomes is suggestive of a weak effect, at best. Analyses of pre-1996 waivers are inconsistent, with some showing a negative effect on nonmarital ferility (Horvath and Peters, 1999) while others showing no effect (Fitzgerald and Ribar, 2001). Analyses of TANF using difference-in-difference methods, comparing either more-educated and less-educated women or high-wage and low-wage women, show no effect of TANF on marriage but possibly a negative effect on living independently (Ellwood, 2000; Schoeni and Blank, 2000). Random-assignment evaluations are particularly problematic for the study of family structure because of the entry-effect problem and the problems of contamination noted earlier. Of those noted in Table 9, only one (the Delaware study) showed a significant effect on marriage. The reason that particular experiment showed an effect and others did not is not clear.

The evidence on the specific effects of family caps and living arrangements restrictions in the law is quite weak, for the same reason that separating the impacts of the individual components of welfare reform from another has not been successful in the study of employment and earnings impacts. Some waiver evaluations, particularly one conducted in New Jersey (Camasso et al., 1998a, 1998b), have been used to assess the effects of family caps but these evaluations are problematic because the family cap was bundled in with changes in work

requirements, earnings disregards, and other features common in welfare waiver programs. Thus there is no direct evidence from random-assignment evaluations of family cap effects because none has varied the presence of the family cap, holding other reform features fixed.

Finally, there has been considerable analysis of the effect of the block grant structure of TANF on spending on the poor. As noted previously, the shift from a matching to a block grant should be expected to reduce spending. Predictions of the magnitude of the spending decline depend directly on the size of the price elasticity of benefits which, as noted before, is not agreed upon. Ribar and Wilhelm (1999) predict very small reductions while Chernick (1998) predicts benefit declines in the range of 15 to 30 percent (see also Chernick and McGuire, 1999); Inman and Rubinfeld (1997) predict spending declines of 40 to 66 percent in low-income states and 0 to 18 percent in high-income states. In addition, there has been considerable speculation that there will be a "race to the bottom," as states facing a higher price of benefits become more sensitive to the influence of cross-state migration in search of higher benefits, leading to a cascading series of real benefit cuts across the states. Theoretical work supports this intuitive prediction, and simulations suggest that benefits could be seriously underproduced in such a system relative to the social optimum (Brueckner, 2000; Wheaton, 2000).

To date, none of these predictions have been capable of testing because the block grant levels in the 1996 legislation were set at 1994 AFDC levels. Because the AFDC-TANF caseload has fallen so drastically since 1994, states have generally not been able to spend all of their block grant funds. Thus the block grant constraint has not become binding and hence one should not expect either the (extra) spending declines or the race to the bottom predicted in the literature to have occurred. Further work on this issue must await a rise in spending up to the block grant

level.[59]

V. Reforms: Financial Incentives

Most reform discussions at the current point in the evolution of the AFDC-TANF program concern whether the provisions of the 1996 welfare law should be modified in some way, such as changing or removing the time limits, work requirements, rules governing sanctions, block grant and funding formulas, and the like. There has been no research on the effects of altering these provisions beyond what has already been discussed in the review of research on AFDC and TANF; as noted, the research base for forecasting the effects of altering most of these provisions is exceedingly slim.

One area of discussion where economists have a strong research base is in the area of additional financial incentives to encourage TANF recipients to work, which is the traditional area of interest in the economics literature. Three different types of reforms have been discussed: (i) reductions in the tax rate on earnings in the TANF program (or what are called "enhanced earnings disregards" in policy discussions); (ii) earnings or wage subsidies made available only to those on TANF; and (iii) earnings or wage subsidies made available universally to the low income population.

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[59] In fact, TANF spending by the states stopped declining in 1998 and has risen since then even though the economy was still strong because states began spending their funds on ancillary services like child care. If this trend continues, it is likely that a relatively modest recession could force spending up to the block grant level. Other issues debated in the literature are the adequacy of countercyclical funds to alleviate the potential spending volatility under a block grant system, and how to reduce inequities in the block grants to high and low income states.

Reductions in the tax rate on earnings have been enacted by many states in their post-reform benefit schedules, as noted earlier in this review, as a means to encourage work among recipients in addition to work requirements. Economic models predict that the effect of reducing welfare tax rates on labor supply is ambiguous in sign because new recipients are drawn onto the welfare rolls, whose labor supply is thereby reduced. The majority of the evidence, both from NIT experimental and nonexperimental studies, indicates that the net effect of such reductions on labor supply is approximately zero. This should, therefore, be the prediction one should make for the recent tax-rate reductions enacted by the states.

A recent experiments have addressed the labor supply effects of reduced welfare tax rates and have shown, instead, that they generally increase earnings and employment (Berlin, 2000; Blank et al., 2000). However, the majority of these experiments only test the effects of reduced tax rates on those who are initially on welfare, and, for that group, positive effects on labor supply should occur regardless. Consequently, while the experimental results are of value because they confirm, in broad outlines, the predictions of the static labor supply model for how initial recipients would respond, they do not contradict the literature from prior econometric studies and the NIT experiments because they do not account for the offsetting labor supply effects of new entry.[60]

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[60] See Blank et al. (2000) for a discussion of entry and how it might be reduced by imposing barriers such as a waiting period before the financial incentives are allowed (see also Card et al., 1998). Berlin (2000, p.35) also draws a contrast between the findings of these recent experiments and those of the NIT experiments, noting that the NIT reduced labor supply whereas the tax-rate reductions in the new experiments increased labor supply. However, this is not a proper comparison because the negative labor supply effects in the NIT experiments pertained to the effect of an NIT versus nothing at all (i.e., the treatment-control group comparison), which is expected to be negative from simple theory. In fact, as noted previously, the alternative treatment groups in the NIT experiments which tested alternative welfare tax rates holding the

A new element in recent discussions, however, is an emphasis on coupling work requirements and minimum hours restrictions with tax-rate reductions; the argument is that the work requirement limits the negative labor supply effects that serve as an offset to the work incentives of tax-rate reductions and are thus superior to income support programs with tax-rate reductions but no work requirements. However, this is an incorrect comparison because, as discussed previously, work requirements achieve their positive effects on labor supply by eliminating government support for those who do not work, which is the rationale for an income support program in the first place. Consequently, they must be accompanied by a categorization of the population into those who can and cannot work. The relative merits of the two approaches depend on whether the stronger labor supply effects provided by the work requirement system are countered by the inefficiencies, disincentives, and possible inequities created by a feasible categorization system.[61]

The second type of program, offering wage or earnings subsidies to welfare recipients instead of reducing welfare tax rates, has essentially the same effect if those subsidies are

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guarantee fixed found generally a zero net effect on labor supply, consistent with the findings of complete offset in nonexperimental econometric models. The NIT experiments included not just recipients but rather a sample of the entire low income population, so that the offsetting, negative effects of lowering the tax rate were captured by the comparison of outcomes across alternative treatment groups. This is entirely consistent with a positive effect on labor supply of those initially on welfare, and therefore the results of the NIT experiments and recent recipient-only experiments are not inconsistent.

[61] Some programs with minmium full-time work conditions for receiving the benefits from the tax-rate reduction--such as the New Hope, SSP, and some treatments in the MFIP experiment--were voluntary. In that case, the only issue is whether some who might want to work part-time end up not working at all instead of working full time. The relevance of these programs to the existing TANF program is minimal because the work requirements implemented by the states post-PRWORA are all mandatory.

permitted only for those who remain on welfare. It is immaterial whether an increase in W(1-t) comes from an increase in W or a reduction in t.[62] The major alternative proposal is instead that welfare recipients be allowed to carry those subsidies off the welfare rolls and to keep them after exiting. The effect of this reform on the budget constraint is shown in Figure 9, where CDE is the initial constraint and CD'E' is the constraint after the subsidy is implemented.[63] Assuming that labor supply curves for this population group are forward-bending and that substitution effects dominate income effects, this change has an unambiguously positive effect on labor supply relative to the initial welfare program for those initially on the welfare portion of the constraint. The drawbacks to such subsidies are the same as those for a universal wage or earnings subsidy, to be considered next.

It is worth noting that this type of program would approach that of a universal subsidy program if (i) those who carry the subsidy off the program are allowed to keep it indefinitely and (ii) all eligibles in the population have a finite probability of entering the program within their lifetimes. If both of these conditions hold, all eligibles, including those initially on segment DE, will eventually cycle through the program and hence will have the subsidy available to them off welfare.

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[62] The two may have different effects around the breakeven level, however, depending on how the phaseout and cutoff of the earnings or subsidy is handled. A simple graphical analysis easily demonstrates this (not shown for brevity).

[63] Assuming the subsidy is s percent of earnings, the on-welfare portion of the constraint, segment CD', has slope W(1+s)(1-t), while the off-welfare portion of the constraint, segment D'E', has slope W(1+s). This assumes that the subsidy is included in countable income by the welfare dependent along with pre-subsidy earnings; if it does not, the on-welfare portion of the constraint as slope W(1-t+s). The figure assumes t=1.0 but all statements in the text apply as well for t<1.

The third reform is indeed the offer of a universal earnings or wage subsidy to all low income families. Graphically, this is identical to Figure 9 except that those initially off welfare, on segment DE, are also eligible. The relative merits of wage-rate and earnings subsidies, on the one hand, and a negative income or similar income support program with a G and t, on the other, were debated extensively in the late 1960s and early 1970s (e.g., Barth and Greenberg, 1971; Garfinkel, 1973; Kesselman, 1969, 1973; Zeckhauser, 1971). That literature showed that there will almost certainly be positive effects on labor supply if an income support program is completely replaced by a wage or earnings subsidy. This should not be surprising since benefits are no longer paid to nonworkers under a wage or earnings subsidy, and, from a equity and distributional point of view, a progressive tax system is replaced by a regressive one. As this early literature recognized (Kesselman, 1969; Barth and Greenberg, 1971), and has been noted in this review, replacing an income support program with such a subsidy would require a categorization of the eligible population which has its own difficulties.

The literature also addressed the relative merits of wage-rate versus earnings subsidies. In general, the former were shown to be superior but were acknowledged to have implementation problems created by the need for employers and workers to document hours of work, and the strong incentives for fraudulent reporting of those hours and for collusion between workers and employers to overreport hours worked. To date, these difficulties have prevented a wage rate subsidy from being enacted in the U.S. Earnings subsidies, on the other hand, have the disadvantage that they must be phased out at some earnings level; at and above that point, labor supply disincentives are created.[64] The corresponding issue for welfare reform is how eligibility

[64] See the chapter on the EITC by Hotz and Scholz in this volume for a discussion.

for a universal earnings or wage subsidy program aimed at the welfare-eligible population would be determined, an issue that has not been broached in the literature. If family income is used as the eligibility criterion, then a notch will be created at that income level where the subsidy is lost, creating disincentives to go beyond that point and as well as incentives for those with higher income to reduce labor supply to become eligible. Thus the offsetting effects of earnings subsidies on labor supply cannot be avoided.[65]

VI. Summary

Although the 1996 legislation is now five years past, the TANF program must still be regarded as in a state of transition and not to have fully coalesced into a final form. The implementation of the program as well as myriad of its provisions, such as the imposition of stricter work requirements with more rigorously enforced sanctions for noncompliance and the imposition of time limits, continue to evolve. States are continuing to modify their programs and attempt to improve them over time, as they search for new ways to deal with the the difficulties of the population which they aim to serve. The uncertainties created by a possible

[65] Once again, some programs have been tested which offer universal earnings subsidies to low income families but with a minimum hours constraint (eg New Hope). As before, the increased labor supply effects of this program would have to be balanced by the increased need for categorization of the population, at least if it were made mandatory. If it is made voluntary then, as noted previously, the only issue is whether part-time work should not also be subsidized. It should also be noted that, with a mandatory minimum hours constraint, there is little difference between a wage or earnings subsidy program and an NIT-like income support program with a reduced tax rate, for the two only differ in the nature of the budget constraint above the hours constraint point. If the major labor supply decision is the margin between working at the constraint point or locating below it off welfare, the two programs would have the same effects.

recession, the increasing impact of time limits as more recipients hit those limits over the next few years, and the possibility of further Congressional action, all have the potential to lead to further modifications in the program.

While research on the AFDC program is still useful in many ways, and while the models developed for that program are still applicable to TANF, there are many new features of TANF whose effects cannot be easily extrapolated from AFDC research results. At the same time, direct evaluation of the effects of the TANF program, particularly the evaluation of the independent contributions of its separate individual components, poses many empirical challenges. While the evidence to date is reasonably strong that the TANF program has increased employment and earnings and decreased the caseload, on top of what would have occurred if AFDC had remained in place, the separate effects of work requirements, time limits, sanctions, family caps, and other individual features are essentially unknown. These continuing research challenges, as well as those posed by additional modifications in the TANF program as they occur, will provide a rich research agenda for further research.

References

Aaron, H. 1973. “Why Is Welfare So Hard to Reform?” Washington: Brookings Institution.

Akerof, G. 1978. “The Economics of ‘Tagging’ as Applied to the Optimal Income Tax, Welfare Programs, and Manpower Planning.” American Economic Review 68 (March): 8-19.

Alm, J; S. Dickert-Conlin; and L. Whittington. 1999. "Policy Watch: The Marriage Penalty." Journal of Economic Perspectives 13 (Summer): 193-204.

Baicker, K. 2001. “Extensive or Intensive Generosity? The Price and Income Effects of Federal Grants.” NBER WP 8384, July 2001.

Bane, M.J. and D. Ellwood. 1983. “The Dynamics of Dependence: The Routes to Self-Sufficiency. Cambridge: Urban Systems Research and Engineering, Inc.

_____. 1994. “Understanding Welfare Dynamics.” In Welfare Realities: From Rhetoric to Reform, eds. M.J. Bane and D. Ellwood. Cambridge: Harvard University Press.

Barth, M. and D. Greenberg. 1971. “Incentive Effects of Some Pure and Mixed Transfer Systems.” Journal of Human Resources 6 (Spring): 149-170.

Bartik T. and R. Eberts. 1999. “Examining the Effect of Industry Trends and Structure on Welfare Caseloads.” In Economic Conditions and Welfare Reform,ed.S. Danziger. Kalamazoo: Upjohn Institute.

Beaudry, P. and C. Blackorby. 1998. “Taxes and Employment Subsidies in Optimal Redistribution Programs.” Working Paper 6355. Cambridge: National Bureau of Economic Research.

Bell, S. 2001. “Why Are Caseloads Falling?” Discussion Paper 01-02. Washington: The Urban Institute.

Berlin, G. 2000. “Encouraging Work, Reducing Poverty: The Impact of Work Incentive Programs.” New York: Manpower Demonstration Research Program.

Besley, T. and S. Coate. 1992a. “Understanding Welfare Stigma: Taxpayer Resentment and Statistical Discrimination.” Journal of Public Economics 48 (July): 165-163.

_____. 1992b. “Workfare Versus Welfare: Incentive Arguments for Work Requirements in Poverty-Alleviation Programs.” American Economic Review 82 (March): 249-

261.

_____. 1995. "The Design of Income Maintenance Programmes." Review of Economic Studies 62 (April): 187-221.

Blank, R. 2001. "What Causes Public Assistance Caseloads to Grow?" Journal of Human Resources 36 (Winter): 85-118.

Blank, R.; D. Card; and P. Robins. 2000. "Financial Incentives for Increasing Work and Income Among Low-Income Families." In Finding Jobs: Work and Welfare Reform, eds. D. Card and R. Blank. NY: Russell Sage Foundation.

Blank, R. and P. Ruggles. 1994. "Short-Term Recidivism Among Public Assistance Recipients." American Economic Review 84 (May): 49-53.

_____. 1996. "When Do Women Use Aid to Families with Dependent Children and Food Stamps?" Journal of Human Resources 31 (Winter): 57-89.

Blau, F.; L. Kahn; and J. Waldfogel. 2000. "Understanding Young Women's Marriage Decisions: The Role of Labor and Marriage Market Conditions." Industrial and Labor Relations Review 53 (July): 624-647.

Bloom, D. and C. Michalopoulos. 2001. "How Welfare and Work Policies Affect Employment and Income: A Synthesis of Research." New York: Manpower Demonstration Research Corporation.

Browning, E. 1975. Redistribution and the Welfare System. Washington: American Enterprise Institute.

Brueckner, J. 2000. "Welfare Reform and the Race to the Bottom: Theory and Evidence." Southern Economic Journal 66 (January): 505-525.

Burke, V. 1996. "New Welfare Law: Comparison of the New Block Grant Program with Aid to Families with Dependent Children." Report 96-720EPW. Washington: Congressional Research Service.

Burtless, Gary. 1995a. "Employment Prospects for Welfare Recipients." In The Work Alternative: Welfare Reform and the Realities of the Job Market, eds. Demetra Smith Nightingale and Robert Haveman. Washington: Urban Institute.

_____. 1995b. "What Is the Proper Balance Among Various Types of Welfare-to-Work Programs?" In Looking Before We Leap: Social Science and Welfare Reform, ed. R. Weaver and W. Dickens. Washington: Brookings Institution.

Camasso, M.; C. Harvey; R. Jagannathan; and M. Killingsworth. 1998a. “A Final Report on the Impact of New Jersey's Family Development Program: Experimental-Control Analysis.” New Brunswick: Rutgers University School of Social Work.

_____. 1998b.”A Final Report on the Impact of New Jersey's Family Development Program: Results from a Pre-Post Analysis of AFDC Case Heads from 1990-1996.” New Brunswick: Rutgers University School of Social Work.

Card, D.; P. Robins; and W. Lin. 1998. “Would Financial Incentives for Leaving Welfare Lead Some People to Stay on Welfare Longer? An Experimental Evaluation of ‘Entry Effects’ in the Self-Sufficiency Project.” Working Paper 6449. Cambridge: National Bureau of Economic Research.

Chernick, H. 1998. "Fiscal Effects of Block Grants to the Needy: An Interpretation of the Evidence." International Tax and Public Finance 5: 205-233.

Chernick, H. and T. McGuire. 1999. “The States, Welfare Reform, and the Business Cycle.” In Economic Conditions and Welfare Reform, ed. S. Danziger. Kalamazoo, Michigan: Upjohn Institute.

Chone, Ph. and G. Laroque. 2001. “Optimal Incentives for Labor Force Participation.” INSEE Working Paper 2001-25.

Council of Economic Advisors. 1997. "Explaining the Decline in Welfare Receipt, 1993-1996." Washington.

_____. 1999. " The Effects of Welfare Policy and the Economic Expansion on Welfare Caseloads: An Update." Washington.

Danziger, S.; R. Haveman; and R. Plotnick. 1981. “How Income Transfers Affect Work, Savings, and the Income Distribution.” 19 (September): 975-1028.

Devere, C.; G. Falk; and V. Burke. 2000. “Welfare Reform Research: What Have We Learned Since the Family Support Act of 1988?” Wash: Congressional Research Service.

Ellwood, D. 1986. “Targeting the ‘Would-Be Long-Term Recipient: Who Should Be Served.” Princeton: Mathematica Policy Research.

_____. 2000. "The Impact of the Earned Income Tax Credit and Social Policy Reforms on Work, Marriage, and Living Arrangements." National Tax Journal 53, Pt 2 (December): 1063-1105.

Ellwood, D. and M.J. Bane. 1985."The Impact of AFDC on Family Structure and Living Arrangements." In Research in Labor Economics, ed. R.Ehrenberg, Vol.7. Greenwich: JAI Press.

Evenhouse, E. and S. Reilly. 1999. "Pop-Swapping? Welfare and Children's Living Arrangements." Mimeo, Vanderbilt.

Fein, D.; D. Long; J. Behrens; and W. Lee. 2001. "The ABC Evaluation: Turning the Corner: Delaware's A Better Chance Welfare Reform Program at Four Years." Cambridge: Abt Associates.

Figlio, D. and J. Ziliak. 1999. "Welfare Reform, the Business Cycle, and the Decline in AFDC Caseloads." In Economic Conditions and Welfare Reform,ed.S. Danziger. Kalamazoo: Upjohn Institute.

Fitzgerald, J. 1995. "Local Labor Markets and Local Area Effects on Welfare Duration." Journal of Policy Analysis and Management 14 (Winter): 43-67.

Fitzgerald, J. and D. Ribar. 2001. "The Impact of Welfare Waivers on Female Headship Decisions." Mimeo. Washington: George Washington University.

Foster, E. M. and S. Hoffman. 2001. "The Young and the Not Quite So Young: Age Variation in the Impact of AFDC Benefits on Nonmarital Childbearing." In Out of Wedlock: Causes and Consequences of Nonmarital Childbearing, eds. L. Wu and B. Wolfe. NY: Russell Sage Foundation.

Fraker, T.; R. Moffitt; and D. Wolf. 1985. "Effective Tax Rates and Guarantees in the AFDC Program, 1967-1982." Journal of Human Resources 20 (Spring): 251-263.

Freedman, S. 2000. "Four-Year Impacts of Ten Programs on Employment Stability and Earnings Growth." New York: Manpower Demonstration Research Corporation.

Friedlander, D. and G. Burtless. 1995. Five Years After: The Long-Term Effects of Welfare-to-Work Programs. NY: Russell Sage Foundation.

Friedman, M.1962. Capitalism and Freedom. Chicago: University of Chicago Press.

Gallagher, L.J.; M. Gallagher; K. Perese; S. Schreiber; and K. Watson.1998. One Year After Federal Welfare Reform: A Description of State Temporary Assistance for Needy Families (TANF) Decisions as of October 1997. Washington: Urban Institute.

Garfinkel, I. 1973. "A Skeptical Note on 'The Optimality' of Wage Subsidy Programs." American Economic Review 63 (June): 447-453.

Garfinkel, I. and S. McLanahan. 1986. Single Mothers and Their Children. Washington: Urban Institute Press.

Gottschalk, P. and R. Moffitt. 1994. "Welfare Dependence: Concepts, Measures, and Trends." American Economic Review 84 (May): 38-42.

Gramlich, E. 1982. "An Econometric Examination of the New Federalism." Brookings Papers on Economic Activity 2: 327-370.

Greenberg, D.; R. Meyer; C. Michalopoulos; and M. Wiseman. 2001. "Explaining Variation in the Effects of Welfare-to-Work Programs." Discussion Paper 1225-01. Madison: Institute for Research on Poverty.

Grogger, J. 2000. "Time Limits and Welfare Use." Working Paper 7709. Cambridge: National Bureau of Economic Research.

_____. 2001. "The Effects of Time Limits and Other Policy Changes on Welfare Use, Work, and Income Among Female-Headed Families." Working Paper 8153. Cambridge: National Bureau of Economic Research.

Gueron, J. and M. Pauly. 1991. From Welfare to Work. New York: Russell Sage.

Harris, K. 1993. "Work and Welfare Among Single Mothers in Poverty." American Journal of Sociology 99 (September): 317-352.

_____ . 1996. "Life After Welfare: Women, Work, and Repeat Dependency." American Sociological Review 61 (June): 407-426.

Harvey, C.; M. Camasso; and R. Jagannathan. 2000. "Welfare Reform Evaluation Under Section 1115." Journal of Economic Perspectives 14 (Fall): 165-188.

Hoffman, S. and E. M. Foster. 2000. "AFDC Benefits and Nonmarital Births to Young Women." Journal of Human Resources 35 (Spring): 376-391.

Horvath, A. and H. Peters. 1999. "Welfare Waivers and Non-Marital Childbearing." Mimeo. Ithaca: Cornell University.

Hotz, V. J.; G. Imbens; and J. Klerman. 2000. "The Long-Term Gains from GAIN: A Re-Analysis of the Impacts of the California GAIN Program." WP 8007, National Bureau of Economic Research.

Hoynes, H. 1996. "Welfare Transfers in Two-Parent Families: Labor Supply and Welfare Participation under AFDC-UP." Econometrica 64 (March): 295-332.

_____. 1997. “Work, Welfare, and Family Structure: What Have We Learned?” In Fiscal Policy: Lessons from Economic Research, ed. A. Auerbach. Cambridge: MIT Press.

_____. 2000. “Local Labor Markets and Welfare Spells: Do Demand Conditions Matter?” Review of Economics and Statistics 82 (August): 351-368.

Hoynes, H. and T. MaCurdy. 1994. “Has the Decline in Benefits Shortened Welfare Spells?” American Economic Review 84 (May): 43-48.

Hu, W. 2001. “Welfare and Family Stability.” Journal of Human Resources 36 (Spring): 274-303.

Hubbard, G.; J. Skinner; and S. Zeldes. 1995. “Precautionary Saving and Social Insurance.” Journal of Political Economy 103 (April): 360-399.

Hutchens, R.; G. Jakubson; and S. Schwartz.1989. "AFDC and the Formation of Subfamilies." Journal of Human Resources 24 (Fall): 599-628.

Immonen, R; R. Kanbur; M. Keen; and M. Tuomala. 1998. “Tagging and Taxing: The Optimal Use of Categorical and Income Information in Designing Tax/Transfer Schemes.” Economica 65 (May): 179-192.

Inman, R. and D. Rubinfeld. 1997. “Rethinking Federalism.” Journal of Economic Perspectives 11 (Fall): 43-64.

Keane, M. and R. Moffitt. 1998. "A Structural Model of Multiple Welfare Program Participation and Labor Supply." International Economic Review 39 (August): 553-589.

Kesselman, J.R. 1969. “Labor-Supply Efffects of Income, Income-Work, and Wage Subsidies.” Journal of Human Resources 4 (Summer): 275-292.

_____. 1973. “Incentive Effects of Transfer Systems Once Again.” Journal of Human Resources 8 (Winter): 119-129.

_____. 1976. “Tax Effects on Job Search, Training, and Work Effort.” Journal of Public Economics 6 (October): 255-272.

Ketron,Inc. 1980. “The Long-Term Impact of WIN II: A Longitudinal Evaluation of the Employment Experiences of Participants in the Work Incentive Program.” Wayne, Pennsylvania.

Klerman, J. and S. Haider. 2001. “A Stock-Flow Analysis of the Welfare Caseload.” Santa Monica: Rand Corporation.

Lampman, R. 1968. “Expanding the American System of Transfers to Do More for the Poor.” U.S. Congress, Joint Economic Committee. Washington: Government Printing Office.

Lindbeck, A.;S. Nyberg; and J. Weibull. 1999. "Social Norms, the Welfare State, and Voting." Quarterly Journal of Economics 114 (February): 1-35.

Lurie, I., ed. 1975. Integrating Income Maintenance Programs. NY: Academic Press.

_____. 2001. “Changing Welfare Offices.” Policy Brief No. 9. Washington: Brookings Institution.

McKernan, S.-M.; R. Lerman; N. Pindus; and J. Valente. 2000. “The Relationship Between Metropolitan and Non-Metropolitan Locations, Changing Welfare Policies, and the Employment of Single Mothers.” Mimeo, Urban Institute.

McKinnish, T.; S. Sanders; and J. Smith. 1999. “Estimates of Effective Guarantees and Tax Rates in the AFDC Program for the Post-OBRA Period.” Journal of Human Resources 34 (Spring): 312-345.

Meyer, B. and D.Rosenbaum. 2001. “Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers.” Quarterly Journal of Economics 116 (August): 1063-1114.

Miller, R. and S. Sanders. 1997. “Human Capital Development and Welfare Participation.” Carnegie-Rochester Conference Series on Public Policy 46 (June): 1-43.

Moffitt, R. 1983. “An Economic Model of Welfare Stigma.” American Economic Review 73 (December): 1023-1035.

_____ 1992a. "Incentive Effects of the U.S. Welfare System: A Review." Journal of Economic Literature 30 (March): 1-61.

_____. 1992b. “Evaluation Methods for Program Entry Effects.”. In Evaluating Welfare and Training Programs, eds. C. Manski and I. Garfinkel. Cambridge: Harvard University Press.

_____. 1996. “The Effect of Employment and Training Programs on Entry and Exit from theWelfare Caseload.” Journal of Policy Analysis and Management 15 (Winter): 32-50.

_____. 1998. "The Effect of Welfare on Marriage and Fertility." In Welfare, the Family, and Reproductive Behavior, ed. R. Moffitt. Washington: National Academy Press.

_____. 1999a. "The Effect of Pre-PRWORA Waivers on AFDC Caseloads and Female Earnings, Income, and Labor Force Behavior." In Economic Conditions and Welfare Reform,ed.S. Danziger. Kalamazoo: Upjohn Institute.

_____. 1999b. “Explaining Welfare Reform: Public Choice and the Labor Market.” International Tax and Public Finance 6: 289-316.

_____. 2000. "Welfare Benefits and Female Headship in U.S. Time Series." American Economic Review 90 (May): 373-377.

_____. 2001. "Demographic Change and Public Assistance Expenditures." In Demographic Change and Fiscal Policy, eds. A. Auerbach and R. Lee. Cambridge: Cambridge University Press.

_____. Forthcoming. “Experienced-Based Measures of Heterogeneity in the Welfare Caseload.” In Data Collection and Research Issues for Studies of Welfare Populations, eds. C. Citro, R. Moffitt, and S. Ver Ploeg. Washington: National Academy Press.

Moffitt, R.; A. Cherlin; L. Burton; and L. Chase-Lansdale. 2001. “Disadvantage Among Families Remaining on Welfare.” Paper prepared for the Chicago-Northwestern Joint Center for Poverty Research.

Moffitt, R.; R. Reville; and A. Winkler. 1995. “State AFDC Rules Regarding the Treatment of Cohabitors: 1993.” Social Security Bulletin 57: 26-33.

_____. 1998a. “Beyond Single Mothers: Cohabitation and Marriage in the AFDC Program.” Demography 35 (August): 259-278.

Moffitt, R.; D. Ribar; and M. Wilhelm. 1998b. "The Decline of Welfare Benefits in the U.S.: The Role of Wage Inequality." Journal of Public Economics 68 (June): 421-452.

Moffitt, R. and L.Pavetti. 2000. “Time Limits.” In Finding Jobs: Work and Welfare Reform, eds. D. Card and R. Blank. NY: Russell Sage Foundation.

Moffitt, R. and D. Stevens. 2001. “Changing Caseloads: Macro Influences and Micro Composition .” Economic Policy Review. New York: Federal Reserve Bank.

Moffitt, R. and S Ver Ploeg, eds. 2001. Evaluating Welfare Reform in an Era of Transition. Washington: National Academy Press.

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

Murray, C. 1984. Losing Ground. NY: Basic Books.

Nechyba, T. 1999. “Social Approval, Values, and AFDC: A Re-Examination of the Illegitimacy

Debate." Working Paper 7240. Cambridge: National Bureau of Economic Research.

Oellerich, D. 2001. "Welfare Reform: Program Entrants and Recipients." Mimeographed. Washington: Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services.

O'Neill, J. and M. A. Hill. 2001. "Gaining Ground? Measuring the Impact of Welfare Reform on Welfare and Work." NY: Manhattan Institute.

O'Neill, D. and J. O'Neill. 1997. Lessons for Welfare Reform: An Analysis of the AFDC Caseload and Past Welfare-to-Work Programs. Kalamazoo: Upjohn Institute.

Orr, L. 1976. "Income Transfers as a Public Good." American Economic Review 66 (June): 990-994.

_____. 1979. "Food Stamps for AFDC Families: Income Supplementation or Fiscal Relief." Mimeographed. Washington: U.S. Department of Health and Human Services.

Parsons, D. 1996. "Imperfect 'Tagging' in Social Insurance Programs." Journal of Public Economics 62 (October): 183-207.

Plimpton, L. and D. Nightingale. 2000. "Welfare Employment Programs: Impacts and Cost-Effectiveness of Employment and Training Activities." In Improving the Odds: Increasing the Effectiveness of Publicly Funded Training, eds. B. Barnow and C. King. Washington: Urban Institute.

Ribar, D. and M. Wilhelm. 1999. "The Demand for Welfare Generosity." Review of Economics and Statistics 81 (February): 96-108.

Riccio, J; D. Friedlander; and S. Freedman. 1994. "GAIN: Benefits, Costs, and Three-Year Impacts of a Welfare-to-Work Program." New York: Manpower Demonstration Research Corporation.

Rosenzweig, Mark. 1999. "Welfare, Marital Prospects, and Nonmarital Childbearing." Journal of Political Economy 107 (December), Part 2: S3-S32.

Schoeni, R. and R. Blank. 2000. "What Has Welfare Reform Accomplished? Impacts on Welfare Participation, Employment, Income, Poverty, and Family Structure." Working Paper 7627. Cambridge: National Bureau of Economic Research.

Smith, S. 2001. "Background on the Composition of the TANF Caseload Since Welfare Reform." Washington: Brookings Institution.

Tobin, J. 1966. "On the Economic Status of the Negro." Daedalus (Fall): 89-895.

Tobin, J.; J. Pechman; and P. Mieszkowski. 1967. "Is a Negative Income Tax Practical?" Yale Law Journal 77 (November): 1-27.

U.S. Congress, Committee on Ways and Means. 1994. Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means. Washington: Government Printing Office.

U.S. Congress, Committee on Ways and Means. 1996. Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means. Washington: Government Printing Office.

U.S. Congress, Committee on Ways and Means. 1998. Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means. Washington: Government Printing Office.

U.S. Congress, Committee on Ways and Means. 2000. Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means. Washington: Government Printing Office.

U.S. Department of Commerce, Bureau of the Census. 2000. Statistical Abstract of the U.S.: 1996. Washington:Government Printing Office.

U.S. Department of Health and Human Services. 1995. Report to Congress on Out-of-Wedlock Childbearing. Washington: Government Printing Office.

U.S. Department of Health and Human Services. 1997. Setting the Baseline: A Report on State Welfare Waivers. Washington: Office of the Assistant Secretary for Planning and Evaluation.

U.S. Department of Health and Human Services. 1998. Temporary Assistance for Needy Families Program: First Annual Report to Congress. Washington: Administration for Children and Families.

U.S. Department of Health and Human Services. 1999. Characteristics and Financial Circumstances of TANF Recipients: Fiscal Year 1998. Washington: Administration for Children and Families, Office of Planning, Research, and Evaluation.

U.S. Department of Health and Human Services. 2000. Temporary Assistance for Needy Families Program: Third Annual Report to Congress. Washington: Administration for Children and Families.

U.S. Department of Health and Human Services. 2001. Indicators of Welfare Dependence:

Annual Report to Congress 2001. Washington: Office of the Assistant Secretary for Planning and Evaluation.

U.S. General Accounting Office. 1999. “Welfare Reform: Assessing the Effectiveness of Various Welfare-to-Work Approaches.” Wash: Government Printing Office.

Wallace, G. and R. Blank. 1999. "What Goes Up Must Come Down?" In Economic Conditions and Welfare Reform,ed.S. Danziger. Kalamazoo: Upjohn Institute.

Wheaton, W. 2000. “Decentralized Welfare: Will There Be Underprovision?” Journal of Urban Economics 48 (November): 536-555.

Zeckhauser, R. 1971. “Optimal Mechanisms for Income Transfer.” American Economic Review 61 (June): 324-334.

Ziliak, J.; D.Figlio; E. Davis; and L. Connelly. 2000. "Accounting for the Decline in AFDC Caseloads: Welfare Reform or Economic Growth?" Journal of Human Resources 35 (Summer): 570-586.

Table 1

Major Legislation in the AFDC and TANF Programs

Date	Title of Legislation	Main Provisions
1935	Social Security Act	Created the AFDC program for low-income children without a parent present in household
1961	Amendments to the Social Security Act	Created AFDC-UP program for children in two-parent families where primary earner is unemployed
1967	Amendments to the Social Security Act	Lowered the benefit reduction rate to 2/3; created the Work Incentive (WIN) program
1981	Omnibus Budget Reconciliation Act of 1981	Increased the benefit reduction rate to 1; imposed a gross income limit; counted income of stepparents; allowed waiver authority
1988	Family Support Act of 1988	Created the JOBS program for education, skills training, job search assistance, and other work activities; created transitional child care and Medicaid programs; mandated AFDC-UP in all states
1996	Personal Responsibility and Work Reconciliation Act	Abolished the AFDC program and created the TANF program

Table 2

Comparison of the AFDC and TANF Programs

Item	AFDC	TANF
Financing	Matching grant	Block grant
Eligibility	Children deprived of support of one parent or children in low-income two-parent families (AFDC-UP)	Children in low-income families as designated by state; AFDC-UP abolished. Minor mothers must live with parents; minor mothers must also attend school
Immigrants	Illegal aliens ineligible	Aliens ineligible for five years after entry and longer at state option
Form of Aid	Almost exclusively cash payment	States free to use funds for services and non-cash benefits
Benefit Levels	At state option	Same
Entitlement Status	Federal government required to pay matched share of all recipients	No individual entitlement
Income Limits	Family income cannot exceed gross income limits	No provision
Asset Limits	Federal limits	No provision
Treatment of Earnings disregards	After 4 months of work, only a lump sum $90 deduction plus child care expenses; and nothing after 12 months	No provision

Table 2, continued

Item	AFDC	TANF
Time Limits	None	Federal funds cannot be used for payments to adults for more than 60 months lifetime (20 percent of caseload exempt)
JOBS program	States must offer a program that meets federal law	JOBS program abolished
Work Requirements	Parents without a child under 3 required to participate in JOBS	Exemptions from work requirements are narrowed and types of qualified activities are narrowed and prespecified (generally excludes education and classroom training) and must be 20 hours/week rising to 30/week for single mothers
Work Requirement Participation Requirements	JOBS participation requirements	Participation for work requirements rise to 50% by FY 2002
Child Care	Guaranteed for all JOBS participants	No guarantee but states are given increased child care funds
Sanctions	General provisions	Specific provisions mandating sanctions for failure to comply with work requirements, child support enforcement, schooling attendence, and other activities
Child Support	States required to allow first $50 of child support received by mother to not reduce benefit	No provision

Source: Burke (1996)

Table 3

State Time Limits, August 1998

States	Time Limits
27 States	60 Months
8 States	Intermittent, e.g., 24 out of 60 months; Lifetime of 60 Months
8 States	Less than 60 Months Lifetime
Arizona, Indiana	(1) 24 out of 60 months; lifetime of 60 for adults only; (2) 60 months lifetime
California	For applicants: 18 months but can be extended to 24 months if extension will lead to employment or 60 months if no job available and adults participate in community service. For recipients: 24 months but can be extended to 60 months if no job available and adults participate in community service
Illinois	(1) No limit if family has earned income and works 20 hours per week (2) 24 months for families with no child under age 13 and has no earnings (3) 60 months for all other families
Iowa	Individualized; lifetime of 60
Massachusetts	24 out of 60 months; no lifetime limit
Michigan	No time limit; will use state funds after 60 months
Texas	12,24, and 36 months lifetime for adults only, time period depends on employability of head of household

Source: U.S. DHHS (1998).

Table 4

Monthly Earnings Disregards in TANF as of October, 1997

State	Flat Disregard	Percent of the Remainder
Alabama	0	20
Alaska	$150	0
Arizona	$90	33
Arkansas	20%	50
California	$225	50
Colorado	AFDC	AFDC
Connecticut	0	100[a]
Delaware	AFDC	AFDC
D.C.	AFDC	AFDC
Florida	$200	50
Georgia	AFDC	AFDC
Hawaii	$200	36
Idaho	0	40
Illinois	0	67
Indiana	AFDC	AFDC
Iowa	20%	50
Kansas	$90	40
Kentucky	AFDC	AFDC
Louisiana	$120 - $1,020	0
Maine	differs by county	differs by county
Maryland	0	26
Massachusetts	$120	50

Table 4 (continued)

State	Flat Disregard	Percent of the Remainder
Michigan	$200	20
Minnesota	0	36
Mississippi	$90	0
Missouri	AFDC	AFDC
Montana	$200	25
Nebraska	0	20
Nevada	0	$90 or 20[b]
New Hampshire	0	50
New Mexico	$150	50
New Jersey	0	50
New York	90	42
North Carolina	AFDC	AFDC
North Dakota	0	27[c]
Ohio	$250	50
Oklahoma	$120	50
Oregon	0	50
Pennsylvania	0	50
Rhode Island	$170	50
South Carolina	AFDC	AFDC
South Dakota	$90	20
Tennessee	$150	0
Texas	AFDC	AFDC
Utah	$100	50

Table 4 (continued)

State	Flat Disregard	Percent of the Remainder
Vermont	$150	25
Virginia	0	100[d]
Washington	0	50
West Virginia	0	40 on average (varies)
Wisconsin	0	0
Wyoming	$200-$400	0

Notes:
Source: Gallagher et al. (1998, Table 14)

In cases where the disregards change with the length of the spell, those for the longest spell are shown

AFDC=$90 after 12 months

[a] Disregard is 100% as long as earnings are below poverty line; benefit goes to zero above

[b] Disregard is $90 or 20%, whichever is greater

[c] There is an additional disregard that varies with earnings and family size

[d] Disregard is 100% as long as net income is below poverty line; disregard is 0 if net income is above poverty line but earnings are below poverty line; and benefits goes to zero if earnings are above poverty line

Table 5

Selected Characteristics of AFDC and TANF Families,
1969-1999

	1969	1979	1988	1999
Pct With Earnings	--	12.8	8.4	25.2
Age (Median)	--	--	29.0	31.2
Pct With Less than HS Education	76.7	57.8	47.2	48.9
Family Size	4.0	3.0	3.0	2.8
Pct whose youngest child is less than 2	--	--	43.1	32.3
Pct child-only families	10.1	14.6	9.6	29.1

Sources:
First, fourth, and sixth rows: U.S. DHHS (2001, Table TANF 7).
Second and fifth rows: Oellerich (2001, Table 3).
Third row: for 1969, 1979, and 1988, U.S. Congress (1998, Table 7-19); for 1999, U.S. DHHS (1999, Table 17); figures shown here represent the originals inflated by the fraction non-missing.

Table 6

Recent Studies of the Effect of AFDC on Labor Supply

	Data	Population	Dependent Variable	Welfare Variables	Results
Hoynes (1996)	Survey of Income and Program Participation, 1983-1986	Low Asset Married Couples	Labor Supply and Participation in the AFDC-UP Program	AFDC Guarantee and Tax Rate evaluated at specific labor supply points	AFDC-UP has sizable negative effect on labor supply; marginal changes in G and t have little effect
Keane and Moffitt (1998)	Survey of Income and Program Participation, 1984	Low Asset Single Mothers	Labor Supply and Participation in AFDC, Food Stamps, and Subsidized Housing	Guarantees and Tax Rates in AFDC, Food Stamps, and Subsidized Housing evaluated at specific labor supply points	Sub elast is 1.82 and total income elast is -.21; marginal changes in t have no effect on labor supply
Meyer and Rosenbaum (2001)	Current Population Survey, 1984-1996	Single Mothers	Probability of Working	AFDC and Food Stamp Guarantee and expected benefits if work	Guarantees reduce employment probability and benefits if work increase it

Table 7

Recent Studies of Participation Dynamics in the AFDC Program

Study	Data	Population	Dependent Variable	Welfare Variables	Results
Blank and Ruggles (1994)	Survey of Income and Program Participation, 1986 and 1987 panels	Single Mothers who have been on AFDC and have left	Probability of returning to AFDC	AFDC Guarantee	Guarantee positively affects reentry rate
Blank and Ruggles (1996)	Survey of Income and Program Participation, 1986 and 1987 panels	Single Mothers	Probability of exiting AFDC and probability of becoming ineligible for AFDC	AFDC Guarantee	Guarantee nas a negative effect on exit; many women are still eligible after the exit
Fitzgerald (1995)	Survey of Income and Program Participation, 1984 and 1985 panels	Single mothers on AFDC	Probability of exiting AFDC	AFDC Guarantee	Guarantee negatively affects exit rate
Harris (1993)	Michigan PSID, 1984-1986	Single Mothers who are on AFDC	Probability of exiting AFDC	AFDC Guarantee	Guarantee is insignificant; two-thirds of exits are for employment
Harris (1996)	Michigan PSID, 1983-1988	Single Mothers who have exited AFDC	Probability of Returning to AFDC	AFDC Guarantee	Guarantee is insignificant; other variables do matter

Table 7 (continued)

Study	Data	Population	Dependent Variable	Welfare Variables	Results
Hoynes (2000)	California administrative data on AFDC recipients, 1987-1992	California welfare recipients	Probability of exiting AFDC and probability of reentry	None	Local labor market variables affect transition rates
Hoynes and MaCurdy (1994)	Michigan PSID, 1968-1989	Single mothers who received AFDC	Probability of Exiting AFDC	AFDC Guarantee	Guarantee explains changes in length of welfare spells in some periods but not others

Table 8

Counts of Estimates of Effect of Welfare on
Marriage and Fertility

	All Races			White			Nonwhite or Black		
	Insig.	Sig.	Mixed	Insig	Sig.	Mixed	Insig.	Sig.	Mixed
All Types	8	5	1	8	13	5	10	12	6
By Type:									
Cross-State Levels	6	3	1	2	9	4	7	6	3
Cross-State Changes	1	2	-	4	4	-	1	5	2
Within-State	1	-	-	1	-	-	1	-	-
Time-Series	-	-	-	1	-	1	1	1	1

Source: Moffitt (1998, Table 1).

Table 9

Studies of the Overall Effect of Welfare Reform on Labor Supply, Earnings, Income, and AFDC-TANF Participation

Study	Program(s) Studied	Dependent Variable	Source of Program Variation	Estimated Effect of Welfare Reform
Pre-1996 Waiver Programs				
Bartik and Eberts (1999)	All state waiver programs	AFDC caseload	Cross-state variation in timing of waiver introduction	Essentially zero
Blank (2001)	All state waiver programs	AFDC caseload	Cross-state variation in timing of waiver introduction	Negative
Bloom and Michalopoulos (2001)	Waiver programs in Connecticut, Florida, and Vermont	Employment, earnings, income, AFDC participation	Randomized assignment on population of AFDC recipients	Positive effect on employment and earnings, no effect on income, small or zero effects on AFDC participation
Council of Economic Advisors (1997)	All state waiver programs	AFDC caseload	Cross-state variation in timing of waiver introduction	Negative

Table 9 (continued)

Study	Program(s) Studied	Dependent Variable	Source of Program Variation	Estimated Effect of Welfare Reform
Fein et al. (2001)	Waiver program in Delaware	Employment, earnings, income, AFDC participation	Randomized assignment on population of AFDC recipients	Positive effect on employment and earnings, no effect on income or AFDC participation
Figlio and Ziliak (1999), Ziliak et al. (2000)	All state waiver programs	AFDC caseload	Cross-state variation in timing of waiver introduction	Essentially zero
Moffitt (1999a)	All state waiver programs	AFDC participation rate, labor supply and earnings of less educated women	Cross-state variation in timing of waiver introduction	No effect on employment or earnings; positive effect on weeks and hours worked; negative effect on AFDC participation rate
Mueser et al. (2000)	Waiver programs in five urban areas	AFDC entry and exit rates, employment rate of welfare leavers	Cross-state variation in timing of waiver introduction	Negative effect on entry rate, positive effect on exit rate, positive but small effect on employment rate of leavers

Table 9 (continued)

Study	Program(s) Studied	Dependent Variable	Source of Program Variation	Estimated Effect of Welfare Reform
O'Neill and Hill (2001)	All state waiver programs	Employment, AFDC participation	Cross-state variation in timing of waiver introduction	Positive on employment, negative on AFDC participation
Schoeni and Blank (2000)	All state waiver programs	Labor supply, earnings,income, AFDC participation	Cross-state variation in timing of waiver introduction combined with difference-in-difference using high-educated control group	Positive effects on labor supply, earnings, income; negative effects on AFDC participation
Wallace and Blank (1999)	All state waiver programs	AFDC caseload	Cross-state variation in timing of waiver introduction	Negative
Ziliak et al. (2000)	All state waiver programs	AFDC caseload	Cross-state variation in timing of waiver introduction	Zero (or positive)

Table 9 (continued)

Study	Program(s) Studied	Dependent Variable	Source of Program Variation	Estimated Effect of Welfare Reform
TANF				
Council of Economic Advisors (1999)	--[a]	AFDC-TANF caseload	Cross-state variation in timing of TANF implementation	Negative
Ellwood (2000)	--[a]	Employment, earnings	Difference-in-difference with high-wage control group	Cannot separate effect of EITC and welfare reform
McKernan et al. (2000)	--[a]	Employment	Difference-in-difference with childless women control group	Positive
O'Neill and Hill (2001)	--[a]	Employment, AFDC-TANF participation	Cross-state variation in timing of TANF implementation	Positive on employment, negative on AFDC-TANF participation

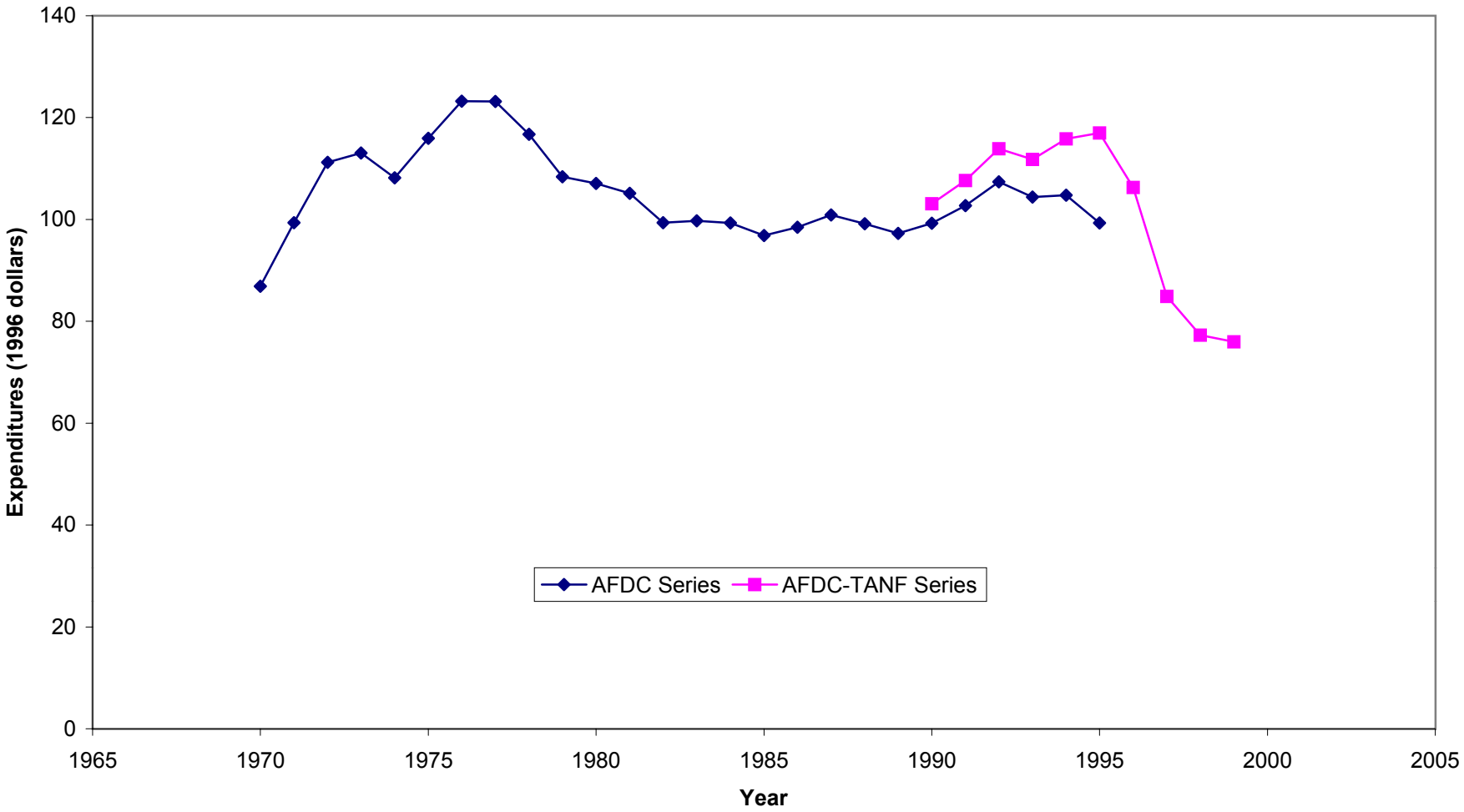
Table 9 (continued)

Study	Program(s) Studied	Dependent Variable	Source of Program Variation	Estimated Effect of Welfare Reform
Schoeni and Blank (2000)	--[a]	Labor supply, earnings,income, AFDC-TANF participation	Difference-in-difference with high-educated control group	No effect on labor supply or individual earnings, positive effect on family earnings and income, negative effect on AFDC-TANF participation
Wallace and Blank (1999)	--[a]	AFDC caseload	1996+ year dummy	Negative

Notes:

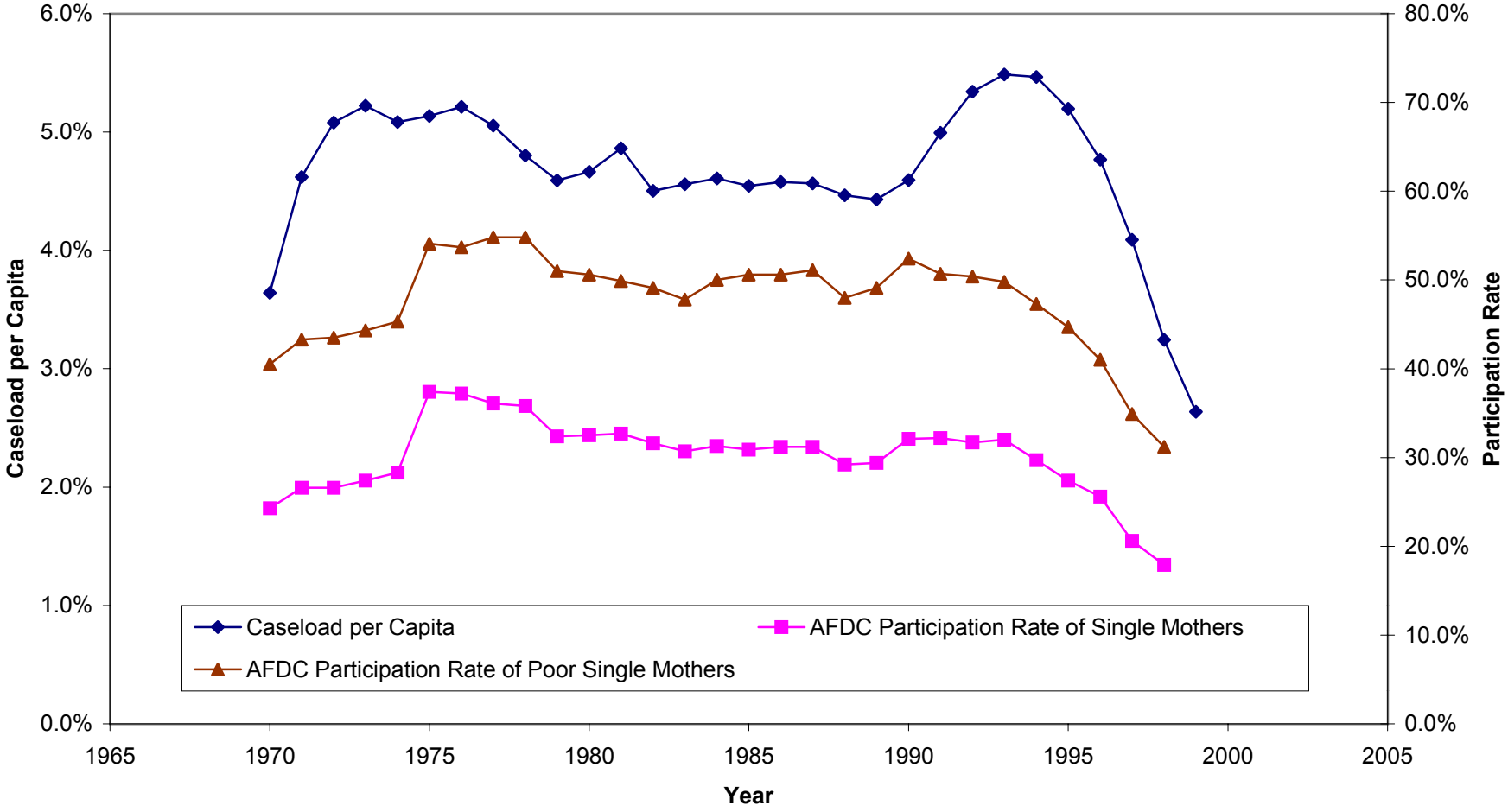
[a] All TANF.

Figure 1 : AFDC and TANF Real Expenditures per Capita, 1970-1999



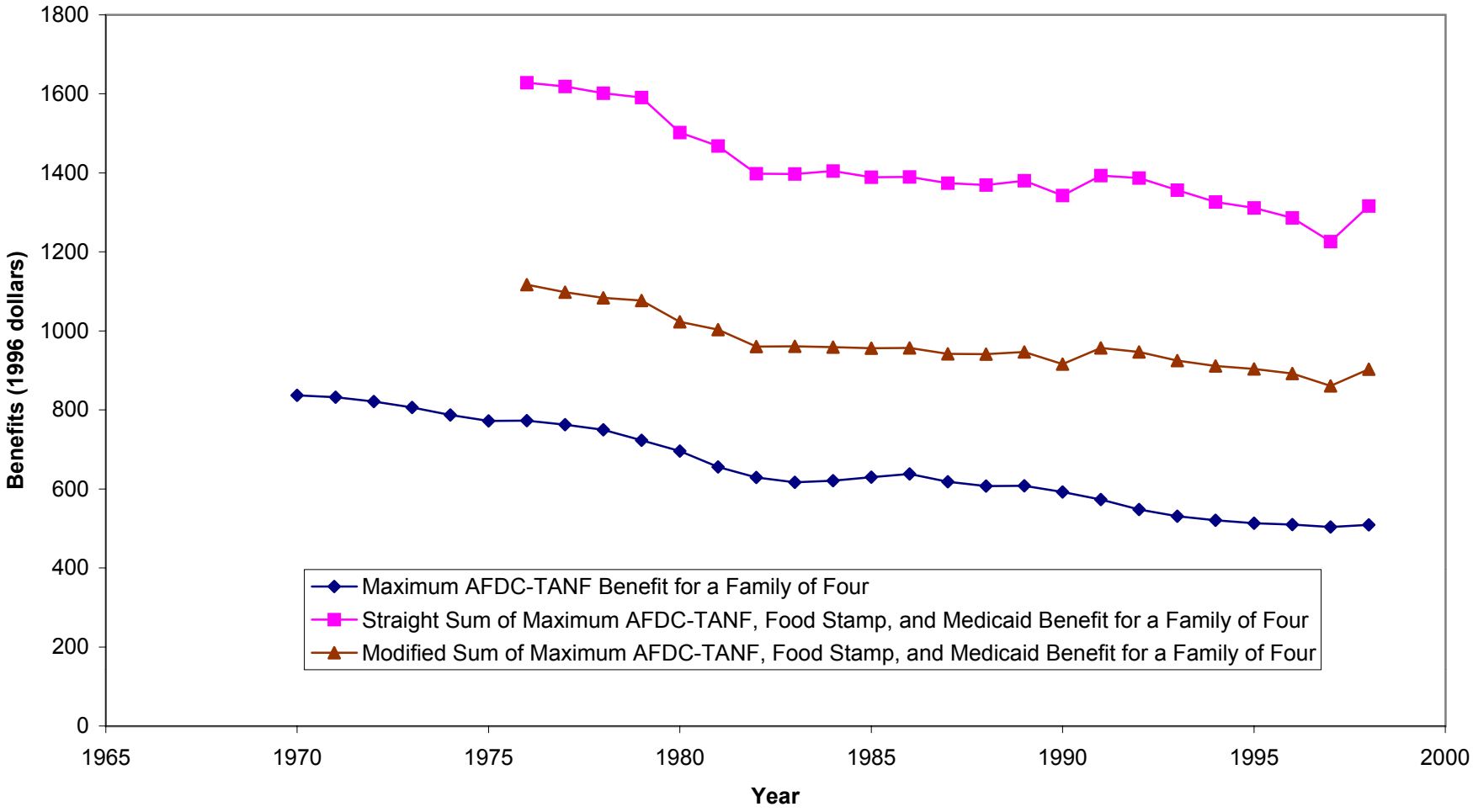
Sources: U.S. DHHS (2001, Table TANF 3); U.S. Congress (2000, Table 7-15); U.S. Department of Commerce (2000, Table No. 2, Population).

Figure 2: AFDC and TANF Caseload per Capita and Participation Rates per Capita, 1970-1999



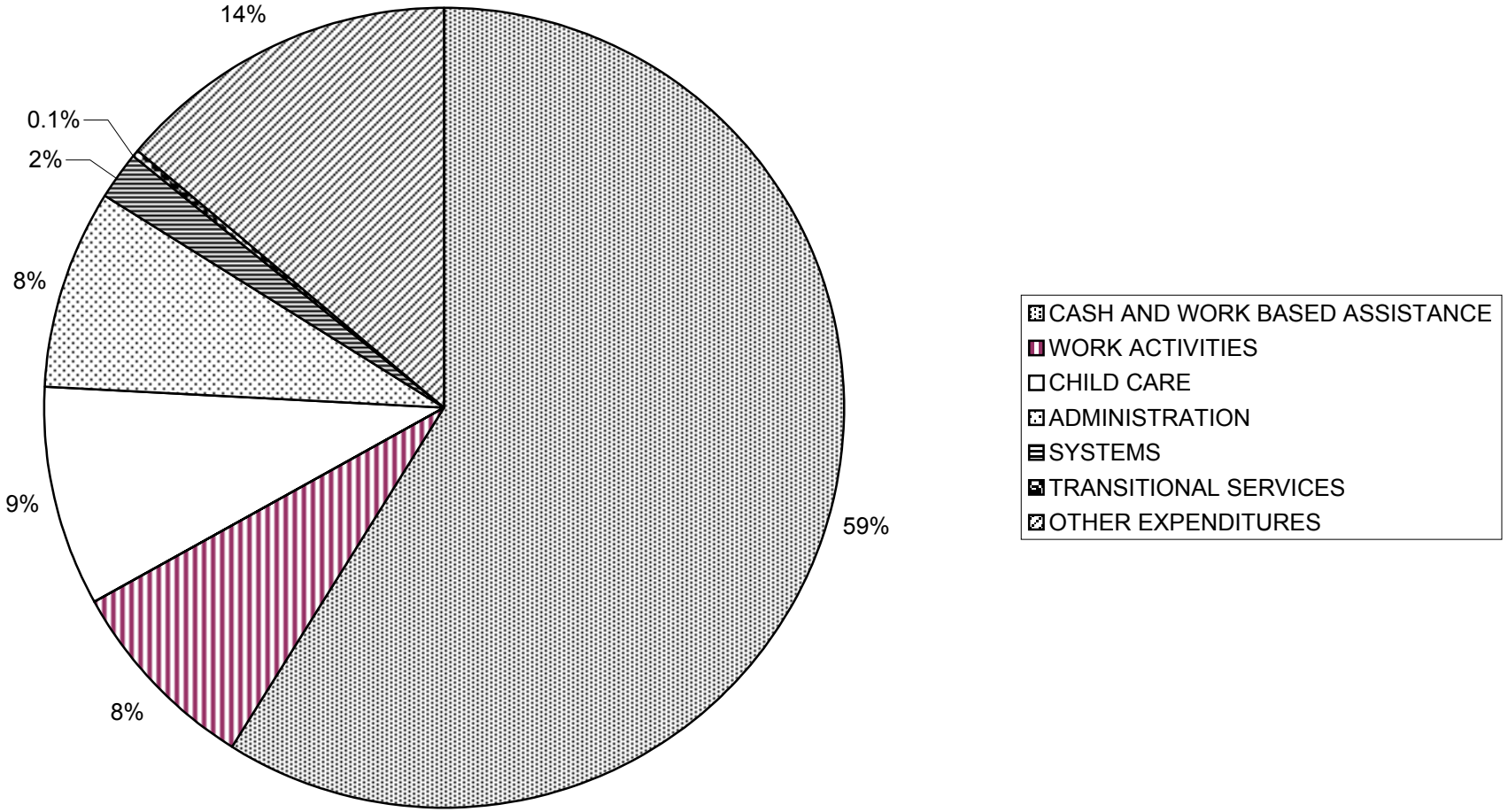
Sources: U.S. DHHS (2001, Table TANF 1); U.S. Department of Commerce (2000, Table No. 2, Population); author tabulations from the Current Population Survey.

Figure 3: Real Monthly AFDC-TANF, Food Stamp, and Medicaid Benefits, 1970-1998



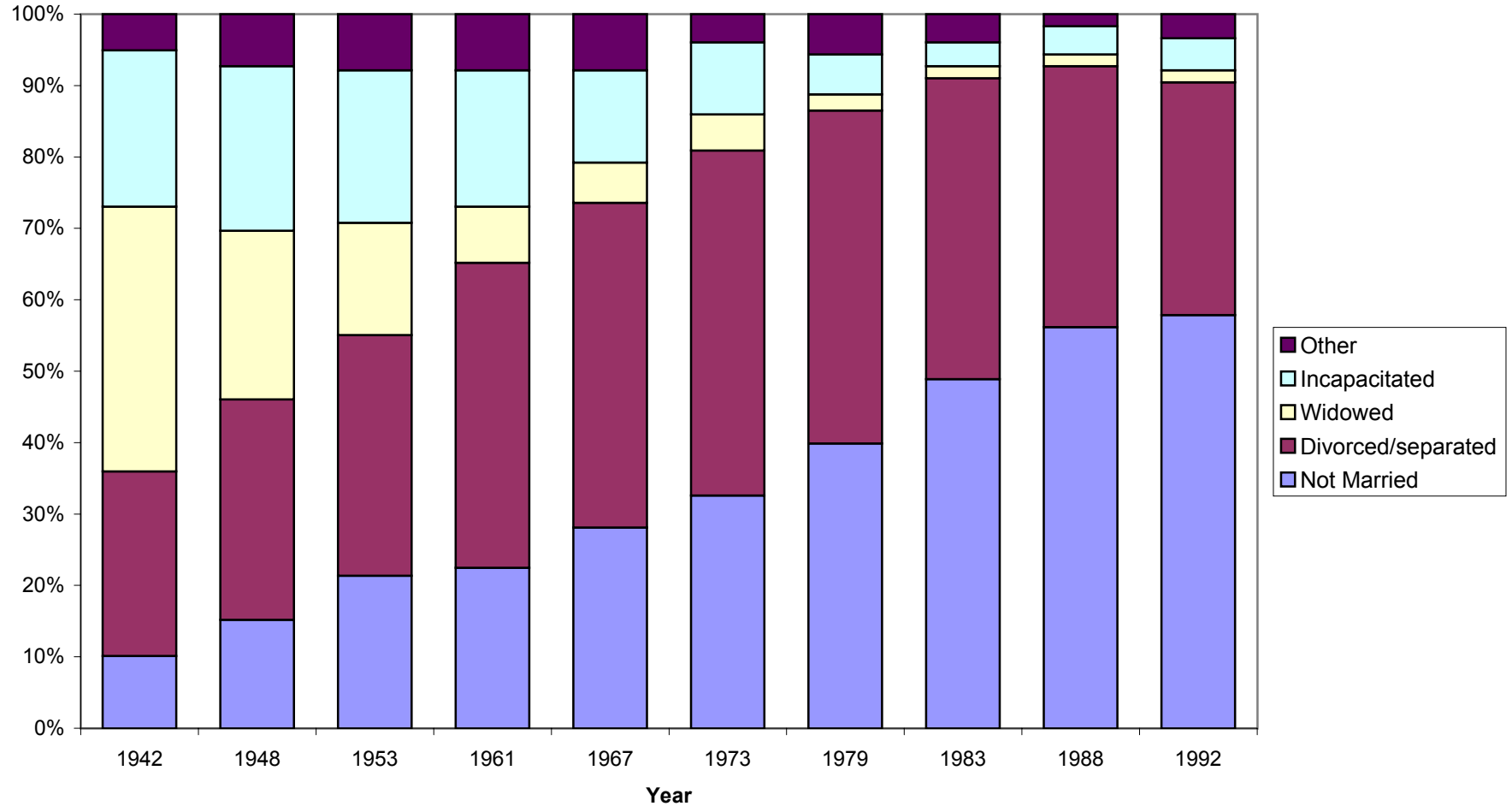
Source: Welfare Benefits Data File, http://www.econ.jhu.edu/People/Moffitt/DataSets.html.

TANF Expenditures by Spending Category, FY99



Source: U.S. DHHS (2000, Chart 2.4).

Figure 5
Basis of AFDC Eligibility, 1942-1994



Source: U.S. DHHS (1995, p.63).

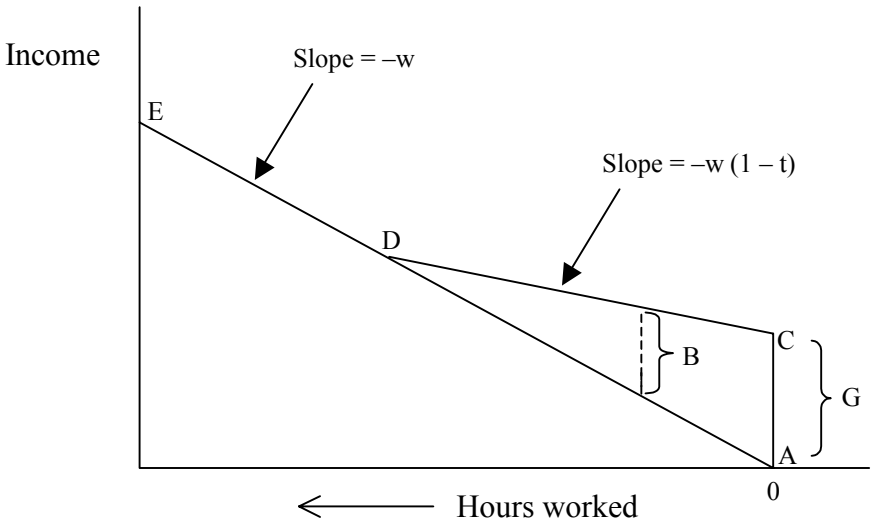


Figure 6. Budget Constraint with a Means-Tested Transfer Program

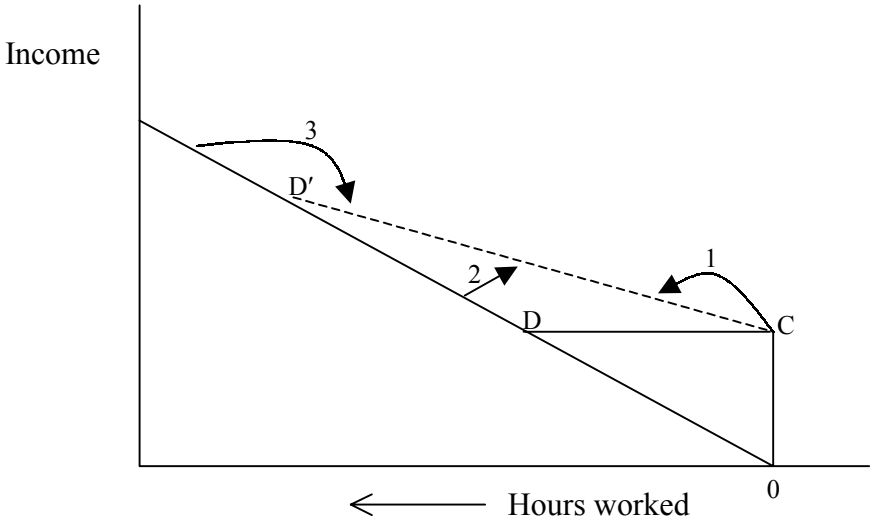


Figure 7. Effect of Change on t on Labor Supply

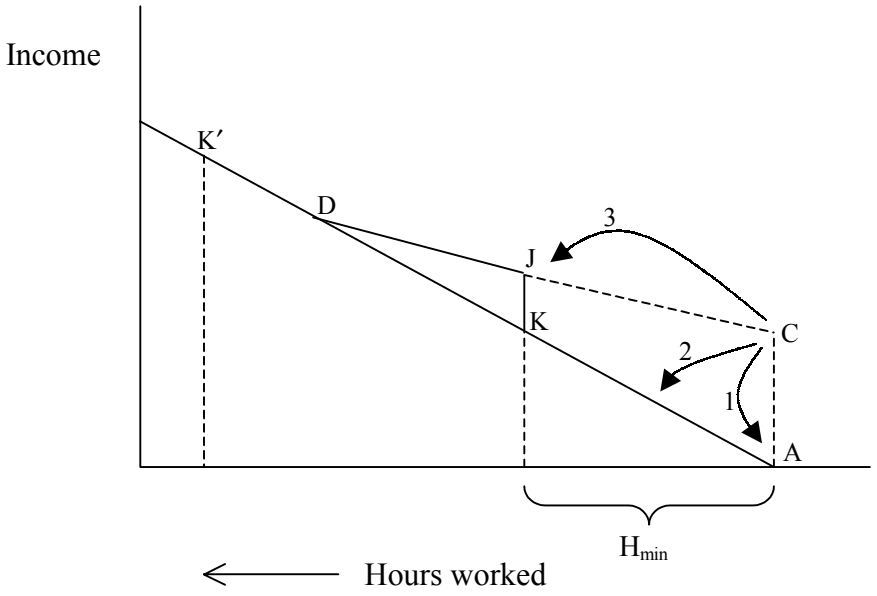


Figure 8. Effect of Work Requirements on Labor Supply

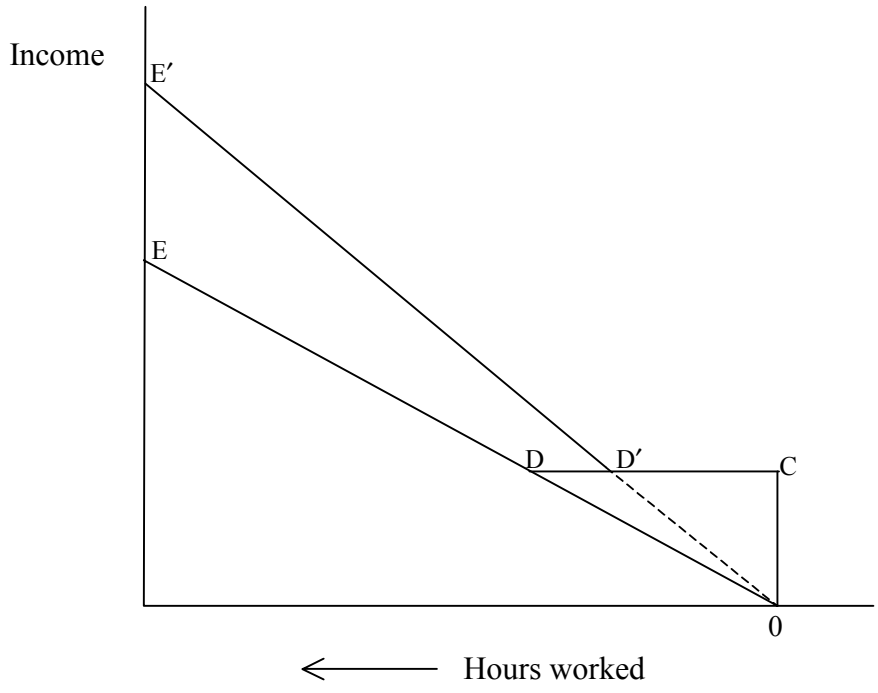


Figure 9. Effect of Earnings Subsidy on Budget Constraint