Temporary Assistance for Needy Families

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Forthcoming in Economics of Means-Tested Transfer Programs NBER and University of Chicago Press

Robert Moffitt, Editor

Final Version September 2015

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1. Introduction

The provision of public assistance to families with children in America faced a watershed moment with the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA). PRWORA replaced the Aid to Families with Dependent Children (AFDC) program, which was an entitlement funded via a federal-state matching grant, with Temporary Assistance for Needy Families (TANF), which is no longer an entitlement and is financed with a fixed federal block-grant to the states. The impetus for reform had been building for at least the two decades prior to passage, but took on greater currency with the dramatic growth in AFDC caseloads in the early 1990s, with then-Governor Clinton's vow to "end welfare as we know it' during the 1992 presidential campaign, and with states expansive experimentation with waivers from federal AFDC rules during President Clinton's first term in office. The state waivers included some elements from prior reform efforts—such as work requirements for benefit eligibility and sanctions for failing to work or participate in a training program—but with teeth. In addition, some states adopted radical new features such as time limits on benefit receipt. Not to be outdone, the Congress jumped on the reform bandwagon and codified some of the waivers into PRWORA, but also added their own twist, including the move to block-grant financing. These policy changes led to a flurry of social science research on the effects of the reform on welfare participation, employment, consumption, saving, health, family structure, and maternal and child well being. The aim of this chapter is to review the research on the TANF program, with a particular emphasis on those studies conducted since the surveys by Blank (2002, 2009), Moffitt (2003), and Grogger and Karoly (2005).

I first begin with a brief history of the TANF program, including sources and uses of funds, eligibility, and benefits. Welfare at the founding of America was very much the purview

of local and state jurisdictions, not too unlike the program today. State, and in some cases local, governments under TANF have great leeway in determining who is eligible for assistance and for how long, and the size and composition of the assistance package. This has resulted in substantial heterogeneity across states in terms of income and asset limits for eligibility, work requirements, time limits, sanctions, benefit levels, among others. One key distinction is that the early programs of the 1800s were wholly funded at the local level (and later the local and state level), whereas today TANF is funded by both federal and state tax dollars. Congress appropriates an annual block grant to states of \$16.5 billion, and each year states are required to spend at least 75 percent of their FY1994 outlays on cash assistance. Positioned in between the present program, and the 19th century city and county programs, was AFDC. AFDC began as a program for children of widows and destitute mothers as part of President Roosevelt's New Deal, and was gradually expanded to include the parent (usually the mother) and then the second parent (with additional restrictions) in the assistance unit with passage of the 1988 Family Support Act. TANF returned to the states the authority to determine eligibility, and while all states allow eligible children and custodial parent to join, a few categorically deny aid to the second parent. Funding for AFDC was initially a grant-in-aid from the federal government, which was then converted to a federal-state matching grant with the introduction of Medicaid in 1965. The block grant of TANF is akin to the grant-in-aid funding mechanism as it is a targeted appropriation with restrictions attached, though unlike TANF, the former grant-in-aid was technically an entitlement.

I next turn to a discussion of trends in the level and composition of participation and spending under TANF. Participation peaked in 1994 with over 14 million recipients on AFDC, but then plummeted nearly 40 percent over the next three years during the final two years of the waiver era and first year of TANF. Perhaps surprisingly, participation has fallen an additional 50 percent, even through much of the Great Recession, so that by 2013 just over 4.1 million persons were on assistance, a level comparable to 1964. Moreover, in 1960, nearly 8 in 10 recipients of AFDC were children, and this fell to just over 6 in 10 by 1980. However, by 2013, 7.5 out of 10 recipients of TANF were children, once again suggesting the program is "regressing to the (historical) mean." Here, however, I issue a cautionary note. A fundamental shift between the AFDC and TANF programs, and one that poses a challenge for measurement and evaluation, is that in a typical year for AFDC 70 cents of every dollar spent was in the form of cash assistance. Under TANF, it is just the reverse. Today, 70 percent of appropriations are in the form of in-kind transfers such as child-care subsidies, transportation assistance, tax credits, mental health and substance use counseling, among others. Because TANF law only requires states to report how many individuals receive cash assistance, not in-kind support, the decline in participation is overstated because cash and in-kind assistance caseloads were combined under AFDC. As a result, comparing inflation-adjusted total spending on AFDC to TANF shows that while spending is lower today than before welfare reform, it is lower by a more modest 18 percent.

The authorizing legislation for TANF stated four main goals: (i) to provide assistance to needy families so that children may be cared for in their own homes or in the homes of relatives; (ii) to end the dependency of needy parents on government benefits by promoting job preparation, work, and marriage; (iii) to prevent and reduce the incidence of out-of-wedlock pregnancies and establish annual numerical goals for preventing and reducing the incidence of these pregnancies; and (iv) to encourage the formation and maintenance of two-parent families. I use these goals as the organizing framework for the next section of the chapter on the theoretical behavioral issues under TANF. While many of the issues overlap that of the AFDC program, the

details of the behavioral models under TANF necessarily differ because of programmatic reforms, especially those policies that affect decisions over time such as work requirements, time limits, and expanded asset tests. As such I adopt a life cycle model of decision making under uncertainty to describe how participation, labor supply, consumption, saving, health, fertility, and marriage are likely to respond in the face of the new complex set of TANF rules. Here I highlight distinctions between predictions from the static and life-cycle models. For example, the static model of labor supply generally predicts that work requirements will lead to an increase in aggregate work hours. The life-cycle model, however, is less clear depending on whether one introduces endogenous human capital formation, and if so, whether work is treated as complementary to human capital as in a "learning-by-doing" model of Weiss (1972) or as a substitute for human capital as in a Ben Porath (1967) "on-the-job training" model. For readers with less formal training in economics, the more technical material on behavioral issues can be skipped without loss of generality.

The theoretical discussion is then followed by a comprehensive review of the empirical literature on TANF. This includes first-generation welfare-reform research on the economy-vs-policy debates surrounding the decline in welfare participation and rise in employment, as well as more second-generation studies on consumption, saving, health insurance and health outcomes, family structure, and child well being. Research on TANF draws from a wide cross-section of the social sciences, and while economists contributed heavily to the evaluation of the program, there was significant new effort from other disciplines such as demography, sociology, developmental psychology, political science, and social work. Where practicable, I try to bring this wider research literature into the review. I devote significant attention to issues of model identification. Much of the research is nonexperimental and of the single-equation variety that

utilizes cross-state over time variation in welfare policies to estimate the effect of reform on the outcome of interest. However, with the introduction of time limits and work requirements, there has been a renewed interest in specifying and estimating structural life-cycle models, and I discuss those contributions as well.

In the final section, I attempt to summarize lessons learned about the effects of welfare reform on family well being among low-income Americans, where I argue that with few exceptions beyond work and welfare participation, the evidence to date is either too mixed or too thin to draw definitive conclusions. This leads to a discussion of and call for future research needs as we approach the 20th anniversary of welfare reform.

2. Program History and Rules

The roots of the present day TANF program lie in colonial America where public relief was the legal responsibility of the local government (town or county) and financed at the local level, typically via a property tax (Ziliak and Hannon 2006). Eligibility was also determined by local, or in a few cases, state governments. Assistance was provided both in the form of "outdoor relief," i.e. cash payments and in-kind transfers to those living independently, as well as in the form of "indoor relief," which generally meant institutionalization into almshouses. The provision of outdoor relief came under great pressure from groups like the Charity Organization Society after the deep recessions of the 1870s and 1880s swelled the rolls, and in response dozens of cities either eliminated or reduced outdoor relief and replaced it with voluntary assistance from private charities and religious organizations (Katz 1986; Ziliak 2004). By the start of the 20th century most state and local governments turned away from poorhouses as a viable form of assistance, owing to the record of deplorable conditions and questionable success

in aiding the poor. Likewise, private charity as a primary means of relief fell out of favor after the 1893-94 recession, and in its place came the ascendance of state-funded and administered outdoor-relief programs. One such program was known as Mothers' Pensions, which provided assistance to impoverished widowed mothers with young children, and indeed, by 1920 forty states offered the program (Skocpol 1992).

The financial burden of these pensions on states surged with the onset of the Great Depression, and this led to the federalization of the pension program with passage of the Social Security Act of 1935 (P.L. 74-271), that among other things, created the Aid to Dependent Children program (ADC). The stated purpose of the ADC program was to "release from the wage-earning role the person whose natural function is to give her children the physical and affectionate guardianship necessary not alone to keep them from falling into social misfortune, but more affirmatively to rear them into citizens capable of contributing to society." (Green Book 2008, p. 7-2). Keeping in line with the mothers' pension program, the ADC program's focal target population was widowed mothers with young (pre-teen) dependent children. However, with passage of the 1950 amendment to the Social Security Act, coverage was extended to impoverished mothers caring for a child, not just those widowed (Fishback and Thomasson 2006). Reflecting that expanded reach, ADC was renamed Aid to Families with Dependent Children (AFDC) as part of the 1962 Public Welfare Amendments. These amendments also extended, at state option, assistance to those families with a second adult (usually a father) who was present and unemployed or underemployed (and not necessarily permanently disabled), creating two streams of assistance, the AFDC-Basic and AFDC-Unemployed Parent (AFDC-UP) programs.

Although nominal work requirements were introduced into the AFDC program in 1967,

as well as "rehabilitative services" a decade earlier, the work requirements were rarely enforced and thus for most recipients the program provided assistance for mothers (and/or families with an unemployed parent) for care in the home. This emphasis changed, however, with passage of the Family Support Act of 1988 (FSA), which required most welfare mothers without a child under age three to engage in education, work, or training under the Job Opportunities and Basic Skills Training Program (JOBS). The Family Support Act also required all states to participate in the AFDC-UP program (only about half the states did so until that point), and it also created child care programs and associated subsidies for those mothers engaging in training or transitioning from welfare to work (Green Book 2008, p. 7-4). Since the 1960s, states had been granted authority to request waivers from Federal program rules under Section 1115 of the Social Security Act to experiment (usually via demonstration projects) with their welfare programs, but few exercised the option prior to the Reagan Administration in the mid-1980s. On the heels of the FSA, however, caseloads began to explode (for reasons unrelated to FSA, see Ziliak, et al. 2000; Blank 2001), and thus by 1992, twelve states were authorized to receive waivers. By the end of President Clinton's first term in 1996, the number of states with approved waivers leapt to forty-three. These state initiatives set the stage for Congress to act, and on August 22, 1996, Clinton signed PRWORA into law, which eliminated AFDC and created its replacement, TANF. The authorizing legislation for TANF expired in 2002, and after a series of continuing resolutions, the program was renewed for another five years with the Deficit Reduction Act of 2005. Since 2010, TANF has operated on annual continuing resolutions. Table 1 contains a timeline of legislation affecting the TANF program, while Table 2 provides a summary of key differences between AFDC and TANF, including some amendments to the initial law as part of the Deficit Reduction Act of 2005. See Ziliak and Hannon (2006) for a historical timeline of

major welfare legislation from the 1601 Elizabethan Poor Laws through TANF, Moffitt (2003) for ADC through TANF, and Hahn and Frisk (2010) for changes to TANF as part of DRA 2005.

[Tables 1 and 2 here]

2.1 Financing

Leading up to the creation of the ADC program, funding for mothers' pensions and the precursors of indoor and outdoor relief were strictly a function of local and state governments. The Great Depression and passage of the Social Security Act of 1935 changed that, but only slowly. Specifically, in the early 1930s the federal government provided large grants to states to cope with the swelling rolls of needy families and displaced workers, which was then codified into the creation of Social Security, Unemployment Insurance, and ADC (Fishback and Thomasson 2006). Participation in ADC was voluntary among the states, and assistance came in the form of grants-in-aid. To qualify for federal assistance, states had to submit plans to the Social Security Board for approval, which required, among other things, that the program be made available in all political jurisdictions of the state and that the state participate financially in the program (Bucklin 1939). The grants were capped at one-third of the program cost, up to \$6 per month for the first dependent child and \$4 per month for each additional child. In the first year of 1936, twenty-seven states received federal funds covering just 12 percent of total costs, and this reached forty-one states and 27 percent of total cost by 1939 (Bucklin 1939, Table 4). Although Congress appropriated roughly \$25 million for the ADC program in its first year, it was essentially an open-ended obligation designed to meet need (Ruggles, et al. 1998).

Title XIX of the Social Security Act in 1965, which created the Medicaid and Medicare programs, changed financing of AFDC from a grant-in-aid to an explicit matching formula based on the Federal Medical Assistance Percentage (FMAP) used in determining a state's financial

liability for its Medicaid program. Transitioning from the grant-in-aid to the open-ended FMAP was contingent on the state adopting Medicaid, the latter of which was adopted by all states but Arizona by 1972 (Gruber 2003). Specifically, the federal share of a state's AFDC benefit payments was determined by the matching formula

(1)
$$FMAP = 1 - 0.45 * \left(\frac{State \ per \ capita \ income}{National \ per \ capita \ income}\right)^2$$

or that the federal share is inversely proportional to the square of the state's per capita income relative to the national per capita level.¹ If state per capita income is the same as the aggregate level then the federal share is 55 percent, but if state income exceeds the national level then the FMAP is set at a floor of 50 percent. In the last full year of AFDC in 1996 the matching rate was 50 percent for eleven states plus the District of Columbia, and averaged about 60 percent across all states, with Mississippi receiving the largest federal subsidy of 78 percent (Green Book 1998). Because of the relative permanence of a state's location in the national income distribution, the FMAPs remained fairly stable across the three decades in use for the AFDC program. During this period, upwards of ten states devolved some share of their costs to the local level, reaching as high as 50 percent in both New York and North Carolina.

One of the most fundamental changes with welfare reform was that the federal openended obligation to states under AFDC, that implicitly rose and fell with the health of the state's macroeconomy, was severed with the creation of the TANF program. Funding for TANF is now provided to states primarily as a fixed block grant (basic block), a grant-in-aid much more in spirit with funding under ADC, along with a supplemental grant and a recession-related contingency grant (Green Book 2008; Falk 2012; Schott, et al. 2012). The basic block grant to states is based on the maximum of federal expenditures on cash assistance, emergency aid, and

¹ For more detail on the FMAP see Kaiser Commission (2012).

job training under AFDC over the four fiscal years 1992 to 1995, and totaled \$16.5 billion across all states and DC. The grant is fixed in nominal dollars, and thus the real value of the grant has declined by over a quarter since 1997. Congress appropriated supplemental grants to those state's that were deemed disadvantaged by the reliance on the FMAP in the early 1990s, in particular those states with high population growth rates and those that provided very low cash benefits relative to their poverty rates under AFDC. In total seventeen states qualified for supplemental grants, which were funded at \$319 million per year from 2001-2011, but subsequently have been dropped (Falk 2012). A \$2 billion contingency fund was established with PRWORA to those states that met an "economic need test," defined as an excess unemployment rate or food stamp caseload growth, and spending on TANF out of its own funds in excess of what the state spent in FY1994.² Monthly payments out of the contingency fund are capped at 1.67 percent of a state's basic block grant. The contingency fund ran out in FY2010 during the Great Recession, highlighting the lack of buoyancy of the basic block-grant structure to respond to economic need compared to the matching-grant funding under AFDC. States did, however, gain access to an "emergency" TANF fund of \$5 billion for FY2009-10, and a new allocation of \$612 million was added to the contingency fund in each of FY2012-FY2014 (Falk 2012; OFA 2014).

The TANF legislation mandated that states continue to provide financial support for lowincome families as a condition for receipt of the basic block, known as the maintenance-of-effort (MOE) requirement. Specifically, states are required to spend annually at least 75 percent of the outlays on cash assistance, emergency aid, and job training incurred as part of their contribution

² The specific economic need test is for (i) the 3-month seasonally adjusted unemployment rate to be at least 6.5 percent and at least 10 percent higher than the corresponding 3-month period in either of the prior two years; or (ii) for the food stamp caseload (renamed Supplemental Nutrition Assistance Program (SNAP) after FY2008) over the prior 3-month period to be at least 10 percent higher than the adjusted caseload over the same three-month period in FY1994 or FY1995. The adjustment is determined by excluding those cases deemed ineligible for food stamps as part of PRWORA, e.g. legal immigrants in the country for less than five years.

to AFDC funding in FY1994.³ In the aggregate this totals to \$10.4 billion (Falk 2012). States can count any state, local, or "third party" non-governmental spending (e.g. spending by food banks or domestic violence shelters) directed towards needy families as long as it is tied to at least one of the four goals of TANF (Schott, et al. 2012; Germanis 2015). Indeed, states can reduce direct spending on TANF while simultaneously increasing the use of "third-party" funds to count as MOE, such as Georgia where third-party funds now make up 40 percent of MOE while nominal cuts in direct spending were implemented (Schott, et al. 2012). If it is a new activity beyond prior commitments under AFDC, then the state needs to demonstrate that it is in excess of FY1995 spending on that activity. One such example of new spending used by many states to meet MOE is refundable State Earned Income Tax Credits (EITC)—by 2011 twenty-one states were using TANF/MOE to fund a state EITC (Schott, et al. 2012). Failure to meet the state MOE results in a dollar-for-dollar reduction in the basic block grant in the ensuing fiscal year. This was a nonissue for most states, especially post-DRA 2005 when TANF law was changed to allow states to utilize excess MOE spending toward meeting their work participation rate requirements, as was done by 32 states in FY2007 (Hahn and Frisk 2010).

2.2 Uses of Funds

Broadly speaking, TANF funds (including MOE) may be spent for the purpose of providing support in the form of "assistance," i.e. cash and near-cash benefits, and "nonassistance," such as child care, transportation, work supports, employer subsidies, refundable state EITCs, education and training programs, counseling, non-recurrent benefits such as diversion payments, and Individual Development Accounts (TANF Tenth Report to Congress 2013). As discussed in the next section, states are only obligated to report on the number of

³ The state MOE rises to 80 percent of FY1994 AFDC spending if the state fails to meet its work participation requirement.

persons served in assistance cases, but do not have reporting requirements on the number of persons receiving non-assistance. This poses a real challenge for evaluation of program reach given that two-thirds of current spending in TANF is on non-assistance.

States have considerable leeway on how to design and distribute program benefits, including using different eligibility criteria for different programs within TANF. States may transfer up to a combined 30 percent of the TANF basic grant to the Child Care and Development Block Grant (CCDBG) and the Social Services Block Grant (SSBG). Transfers to the SSBG may be available to families up to twice the poverty line, and spending out of the basic grant on "healthy marriages" and preventing out-of-wedlock pregnancies are potentially open to families regardless of income level as long as it is non-assistance spending (Schott, et al. 2012). Indeed, PRWORA bestowed enough flexibility to states that ten chose to devolve some of these programmatic decisions to the county-level government.

The state MOE funds may be "commingled" with the federal block grant, "segregated" from the block grant but spent on the state TANF program, or "separated" from federal funds and operated outside of the TANF program (known as separate state programs (SSP)) (TANF Tenth Report to Congress 2013). The distinction lies in the degree to which the MOE funds are subject to federal rules. Commingled funds are subject to the full spectrum of federal TANF rules, while segregated and separated are subject to progressively fewer federal rules.⁴ For example, neither segregated nor separate funds are subject to the federal five-year time limit, but segregated funds do face federal restrictions for individuals convicted of certain drug felonies, whereas separate funds are exempt (Lower-Basch 2011, Table 2).

⁴ Some states operate solely-state funded programs (SSF), which are funded outside of TANF and MOE and thus not subject to any of the federal rules. They are designed to assist those families facing difficulty meeting work requirements such as two-parent families or those with significant barriers to employment (but not so severe as to gain an exemption under TANF). A Government Accountability Office survey of states indicated that as of 2010 twenty-nine states operated SSFs, most of which began after enactment of DRA 2005 (Hahn and Frisk 2010).

2.3 Eligibility and Benefits

Eligibility for AFDC was restricted to needy children under age 18 who were deprived of parental support owing to parental absence, incapacitation, or unemployment.⁵ Funds were also available for the child's caretaker (usually the mother), and for another adult deemed essential to the child's welfare (usually the unemployed father). It was not possible for an AFDC recipient to also receive support from Supplemental Security Income (SSI), though families could blend benefits, with some on AFDC and some on SSI. Undocumented immigrants were ineligible, as were children that received foster care payments.

Economic eligibility under AFDC was determined by the family's income and liquid and vehicle assets, the upper limits of which were set by the federal government. Income of all family members was generally deemed to the child, and the monthly gross income was not permitted to exceed 185 percent of the state's monthly "need standard."⁶ Net, or countable income, was not allowed to exceed 100 percent of the need standard. States did not have leeway in determining what counted as income without a waiver, but what was left unspecified in federal law was the definition of "need standard." Roughly half the states defined need in terms of minimum subsistence compatible with decency and health, another forty percent defined need in terms of a budgetary shortfall relative to the state's assistance standard, and the remainder either specified need by statutory mandate or simply as having no support (Chief 1979). There was substantial cross-state variation in need standards, some of which likely reflected differences in cost-of-living and some political choice, though the real value of the need standard for the

⁵ Children were no longer eligible upon their 18th birthday, unless they were a full-time student, then benefits were paid until their 19th birthday.

⁶ Some income sources were exempt. For example, after passage of the FSA in 1988 EITC refunds were no longer counted as income, and were exempt from treatment as a liquid asset for two months after receipt (Green Book 1998). In addition, the gross income limit was dropped to 150 percent of need for a few years after OBRA 1981, before returning to 185 percent.

median state declined by 38 percent over the last three decades of the program (Green Book 1998). TANF no longer requires that states establish a need standard, though most states continue to do so. However, only fourteen states in 2012 applied some variant of the "185 percent of need" for the gross-income limit. Most states under TANF adopted a more stringent test, and in some cases dropped the gross income test altogether (Kassabian, et al. 2013). For example, in 2012 West Virginia applied a 100 percent of need for a gross income test, while Alabama applied a 100 percent of the payment standard (see definition below) for the monthly net income limit, which was only \$215 for a family of three.

States were initially given some latitude in setting real property and vehicle asset limits used in determining benefit eligibility under AFDC. Indeed, prior to the Omnibus Budget Reconciliation Act of 1981, there was substantial state-specific heterogeneity in asset limits, but by 1984 only five states had vehicle limits below the allowable federal maximum of \$1500, and nine states had non-housing, non-burial personal property limits below the federal maximum of \$1000. By 1994, all states but two had their asset limits set equal to the federal maximum (California and Iowa had received welfare waivers prior to 1994). Under TANF, states once again have the flexibility to set the liquid and vehicle asset limits for eligibility. As shown in Table 3, most states raised the ceiling on liquid assets, and five states eliminated that test altogether.⁷ Moreover, with few exceptions, states now exempt at least one vehicle from the test if it is used to meet basic needs or to transport a disabled dependent, and nineteen states exempt all vehicles when determining initial eligibility. For most of the states, the published goal of increasing asset and vehicle limits associated with TANF was to promote welfare-to-work transitions and saving among low income households, consistent with TANF goal (ii) listed in

⁷ The information in Tables 3-5 come from the Welfare Rules Databook in Kassabian, et al. (2013), which is a rich resource containing a vast amount of detail on the specific policies adopted by states over time.

the Introduction.

[Table 3 here]

What set TANF apart from its predecessor was the introduction of a host of new eligibility rules and limits. Most of the new program features evolved out of state-level experiments conducted in the early 1990s via waivers from federal regulations granted by the U.S. Department of Health and Human Services. For example, as shown in Table 3, thirty-two states offer formal diversion programs that steer eligible applicants away from the official caseload and instead toward a lump-sum payment, typically valued at three months of the maximum benefit for a given family size. This policy is targeted primarily to those potential cases in need of very short-term assistance, and where the adult caretaker is comparatively "job ready." In most states, diversion is voluntary, but also limited to two or three times in a lifetime, and if accepted, usually entails a period of ineligibility for the regular TANF program of three to twelve months, though in seven states the client is immediately eligible. In addition, seventeen states impose a family cap on the size of the benefit, which means that the size of the benefit is restricted in some form from increasing when a child is born into or enters a pre-existing assistance unit. In most cases states do not increase the benefit at all, though there are a few exceptions. Two states (New Hampshire and North Dakota) no longer allow two-parent cases, two others impose new restrictions if the second parent is not disabled, and nine still require the additional tests under the old AFDC-UP program, i.e. the hours and work history tests, and a waiting period (Kassabian, et al. 2013, p. 20).

The policies that garnered the most attention, and controversy, were work requirements, sanctions, and time limits. Work requirements came to the fore in AFDC after passage of the Family Support Act, which mandated that adult caretakers with dependents over age 3 enroll in

JOBS training programs. As summarized in Table 2, the TANF law stipulated that the adult must participate in work activities, and at least half of the caseload must be engaged in 30 hours of work-related activity by FY2002 (20 hours if there is a single parent or caretaker relative of a child under age 6). These activities include, among others, unsubsidized employment, subsidized private or public sector employment, on-the-job training, job search and job readiness assistance (for a maximum of 6 weeks), community service programs, vocational educational training (12 months maximum), and education directly related to employment for recipients without a high school diploma or equivalent. With the Deficit Reduction Act of 2005, 50 percent of all adults in a state receiving assistance in TANF, and 90 percent of two-parent households, must participate in more tightly specified and counted work activities (Parrott, et al. 2007). Those percentages are lowered if TANF caseloads fall below their 2005 levels and/or the state spends on MOE in excess of their mandated 75 percent (Hahn and Frisk 2005). States have the flexibility to decide what work activities count, at how many hours per week, and whether certain persons may be exempt from work requirements. The latter most often involve those working full time in unsubsidized jobs, the elderly, the ill or incapacitated or caring for such a person, and expectant mothers in their third trimester. However, states generally may not exclude these persons when calculating their work participation rates.

Nineteen states now require some form of mandatory job search at the point of benefit application, and in fourteen of those states the sanction for noncompliance is to deny the application. Moreover, if a client is not participating in their assigned work activities, then that case generally faces sanctions, ranging from the adult being removed from the case for a fixed period of time, the family benefit being reduced by a fixed percentage, or the whole family being removed. The initial sanction in twenty states calls for full removal of the benefit and/or case closure, typically for one to three months. After repeat noncompliance, all but three states either close the case or remove the entire family from the benefit. In Idaho, Michigan, Mississippi, Pennsylvania, and Washington the latter sanction is permanent.

[Table 4 here]

TANF imposed a maximum lifetime limit of 60 months of federal benefits for families with an adult recipient, though states have the option of imposing more stringent limits, or even extending assistance beyond the five years provided the support is out of state MOE funds. Federal law exempts child-only cases from the time limit. Table 4 summarizes state time limit policies as of 2012. Thirty-four states adhere to the basic 60-month federal policy (with some deviations, such as benefit receipt in 24 out of every 60 months), six limit assistance to 48 months, two limit to 36 months, and four limit to 24 months or less. After the federal 60 month limit is reached, Massachusetts, New York, Vermont, and the District of Columbia offer unlimited benefits out of non-federal funds subject to various restrictions. Moreover, five states only time limit the adult on the case and continue to provide assistance to the child-only case. States may also exempt 20 percent of their caseload from the 60 month federal limit. The bottom panel of Table 4 highlights that nine states have more complicated time limits, such as Nevada, which staggers 24 months of receipt followed by 12 months of ineligibility.

Beyond the standard income, asset, work, and time limits, many states also opted to impose additional behavioral requirements on the children or adults, or both. For example, adults may be subject to drug testing, while children may be required to maintain a minimum grade point average or attendance (thirty-six states), to receive immunizations (twenty-four states), and to receive regular health checkups (seven states) (Kassabian, et al. 2013, Table III.A.1). Failure to adhere to any of these varied rules and regulations could result in sanctioning of the TANF case for noncompliance. The form of the sanction depends of the activity where the noncompliance occurs, but can entail temporary removal of the adult from the benefit allotment for several months or more, to as severe as permanent removal of the full family from the rolls.

Like most transfer programs, the basic cash benefit amount in AFDC, and its successor TANF, is determined by the maximum benefit amount (G), the rate (t) at which the benefit is reduced as earned and unearned income (Y) increases, and the level and sources of income that can be excluded (D) from benefit determination:

(2)
$$Benefit = G - t * (Y - D).$$

In the AFDC program, the maximum benefit was set at the state level, and as presented in Table 5 there was considerable state variation in generosity, reflecting both income and cost-of-living differences and also voter preferences for redistribution (Ribar and Wilhelm 1999). This variation has continued in the TANF program. Just over half the states increased the nominal maximum guarantee since enactment of PRWORA, but even still there has been an across-theboard decline in the inflation-adjusted value of the maximum payment. As seen in the last column of Table 5 the real benefit declined from 24 to upwards of 70 percent between 1970 and 2012, and for the median state it fell by 51 percent. Although the need standard under AFDC was supposed to reflect some minimum monthly threshold of income necessary to meet basic needs, most states did not tie the maximum benefit to the need standard, but instead utilized a so-called payment standard, and as of 1996, thirty states had payment standards below the need standard (Green Book 1996). And in a dozen of these states, the maximum benefit was below the payment standard. The implication is that even though the household may have passed the gross and income tests, along with the two asset tests, they may not have qualified for any positive benefit if there was a significant discrepancy between the need standard and the maximum guarantee, G.

Under TANF, the need standard is no longer required by law, and only twenty states in 2012 relied on the payment standard to set the maximum, and utilized the basic formula in equation (2) for benefit determination.⁸

[Table 5 here]

The statutory benefit reduction rate, t, on earned income after deductions under AFDC was cut from 100 percent to 67 percent in 1967, only to be raised back to 100 percent as part of OBRA 1981. The statutory tax rate on unearned income was also 100 percent. These tax rates were applied to net (countable) income. Earnings of most household members were counted as gross income, and likewise for nonlabor income, though several sources were exempt such as SSI and food stamps. The monthly deductions allowed included a \$90 work expense disregard, followed by a disregard of \$30 and one-third of remaining earnings. After four months of consecutive earnings, recipients were no longer eligible for the one-third disregard, so the disregard was simply \$120. After eight additional months of consecutive earnings, recipients were no longer eligible for the one-third disregard, so the disregard was simply \$120. After eight additional months of consecutive earnings, recipients were no longer eligible for the one-third disregard, so the disregard was simply \$120. After eight additional months of consecutive earnings, recipients were no longer eligible for the one-third disregard, so the disregard was \$90, after which earnings were taxed at 100 percent.

[Table 6 here]

Under welfare reform most states nominally embraced the "making work pay" philosophy by expanding earnings disregards so that recipients could retain more of the monthly benefit if they worked. Table 6 summarizes the state disregard policy as of 2012. There it is evident that states have adopted a diverse set of policies, ranging from no disregards allowed in Arkansas and Wisconsin, to 100 percent of earnings disregarded (at least in the early months) in the case of eight states. Most, however, continue to allow recipients to deduct a flat dollar

⁸ Kassabian, et al. (2013), Table II.A.2. As noted on p. 94 in this document, "owing to the complexity of state programs, identifying the payment standard and maximum benefit is no longer clear. States may include multiple standards in the benefit calculation, depending on the type or amount of income."

amount, and then a certain percentage of earnings thereafter. Across all jurisdictions listed in Table 6, the average earnings disregard rate is 39 percent, and this rises to 50 percent among those with nonzero rates. This increased generosity in treatment of earnings was tempered by the decision to retain statutory benefit reduction rates of 100 percent. In fact, for seven states the benefit was set at a fraction of the difference between the need (or payment) standard and net income, e.g. South Carolina only awards 28.1 percent of the difference.

[Figure 1 here]

Research by Lurie (1974), Hutchens (1978), Fraker, et al. (1985), McKinnish, et al. (1999), and Ziliak (2007) indicated that the "effective," or average marginal, tax rate that AFDC recipients faced was generally only 40-50 percent of the statutory rate. This gap between statutory and effective rates could be the result of cross-state variation in disregards stemming from state policy choices, by caseworker discretion and/or error, or by shifting composition of income among recipients. Under AFDC states did not have the option of setting disregard standards absent a waiver from federal rules, and thus the latter two reasons likely account for most of the statutory-effective gap. As depicted in Figure 1, after passage of PRWORA the effective rate fell by half in the first five years, whether one considers the rate in terms of the average state (unweighted) or the average recipient (weighted by number of AFDC/TANF recipients). Ziliak (2007) shows that the reduction in these rates were most pronounced among the states that adopted the most aggressive welfare reform policies, suggesting that the observed decline in effective rates reflected state policy.

3. Program Statistics

Figure 2 presents the time series of expenditure on the AFDC/TANF program from its

inception in 1936 until 2012.⁹ Real spending, based on the 2012 Personal Consumption Expenditure Deflator, surged from \$6.8 billion in 1960 to \$23.8 billion in 1970. Moffitt (1987) showed that while part of this growth is attributable to the growth of female-headed families, rising maximum benefit guarantees, and declines in the benefit reduction rate in 1967, the lion's share is unexplained by economic forces. The leading noneconomic explanations include possible shifts in cultural attitudes toward welfare, and a series of court orders that liberalized access to welfare for cohabiting couples, along with passage of the Civil Rights Act of 1964 that forbade discrimination in the allocation of federal funds, including access to welfare among African Americans (Gordon and Batlan 2011). Real spending increased another \$12 billion to \$36 billion in 1977, but then subsequently fell by about \$5 billion over the next five years, first from a growing economy in the late 1970s, and then tightening of eligibility and benefit rules with OBRA 1981. Real spending flat-lined for the rest of the 1980s, until the run-up in spending from 1990-93, which we will see below was in response to a strong surge in caseloads. With the strong economy, implementation of welfare waivers, and then welfare reform, expenditures fell by one-third in the three-year period after 1994. After that, total spending rebounded by 2000 and then more or less remained flat, though there was a temporary increase in FY2010 when emergency TANF spending of \$5 billion was made available as part of the American Recovery and Reinvestment Act of 2009 (ARRA). Real total spending in 2012 of \$28.9 billion lies in between the amount spent between 1971 and 1972, which is in stark contrast to all other programs in the social safety net that saw significant growth in real spending over the past four decades (Bitler and Hoynes 2010; Moffitt and Scholz 2010; Ziliak 2015).

[Figure 2]

⁹ The figure reports actual spending, and does not include the transfers out of the federal TANF grant to CCDF and SSBG allowed after 1996.

The other aspect of Figure 2 that stands in stark contrast with the past is the shifting composition of spending from cash assistance to in-kind non-assistance after welfare reform. Although not delineated in the figure as it was not recorded on a regular basis, non-assistance typically comprised one-fourth to one-third of spending under AFDC. Under TANF, however, there has been a complete reversal. As early as 2000, one-half of spending was directed to assistance and the other half to non-assistance, and by the end of the decade two-thirds of spending was in the form of non-assistance. While states must generally use TANF dollars to support needy families with children, they are able to set different criteria for assistance versus non-assistance programs, and as such often direct non-assistance funds to a broader cross-section of families (i.e. higher income), suggesting the program may be less target efficient. Indeed, federal and state cash assistance continued its secular decline, even through the Great Recession (except for FY2010), and total spending was propped up only by non-assistance spending via state MOE.

Figure 3 depicts how federal TANF and state MOE funds were allocated in FY2012. Only 36 percent was spent on basic assistance and work-related activities, in contrast to the 59 percent reported for FY1999 in Figure 5.4 of Moffitt (2003). Moreover, 8 percent of funds were transferred out to TANF to the CCDBG and SSBG, about 12 percent of funds were allocated to child care (most in the form of non-assistance subsidies), another 8 percent were allocated to refundable EITC and child tax credits, 7 percent to address goals (iii) and (iv) of TANF to reduce out-of-wedlock pregnancy and encourage two-parent families, and a sizable 15 percent of funds were allocated to "other." This catch-all category includes child welfare payments and services, early childhood education, counseling for domestic violence, mental health and addiction, and TANF program expenses, among others (TANF Tenth Report to Congress 2013).

[Figure 3 here]

Figures 4a and 4b shed some light into the trends underlying spending by depicting the evolution of TANF caseloads and recipients from 1960 to 2013.¹⁰ Also reported are the fraction of total cases and fraction of total recipients that are children. This is important because childonly cases are not subject to federal time limits and work requirements. The trends in spending in Figure 2 track closely the trends in caseloads and recipients in Figure 4 from 1960 until 1997, but whereas total spending rebounded and then remained relatively stable in real terms in the ensuing decade, caseloads continued to decline. The disconnect stems from the fact that post-TANF states are only required to report the number of cases and recipients receiving assistance, and not the number of persons served in non-assistance. This inhibits greatly our ability to evaluate welfare reform. Most researchers and members of the policy and advocacy communities hone in on the caseload trends, but this ignores the fact that scores of individuals also receive help in the form of non-assistance and do not show up in the caseload counts. Also of note in Figure 4a is the four-fold increase in the fraction of cases that are child-only from 10 percent in 1990 to over 40 percent in 2013. This has led to a "return to normal" in terms of the composition of recipients to about 75 percent children found in the 1960s.

[Figures 4a,b here]

The aggregate caseload trends mask some important heterogeneity in state experiences. For example, in the mid to late 1980s aggregate AFDC caseloads held fairly steady, but as documented in Ziliak (2002), this overlooks the fact that nearly half the states experienced declines in caseloads, and the other half experienced increases, such that in the aggregate they cancelled out. Figure 5 presents maps depicting caseload change in the welfare reform era, first

¹⁰ The figure includes participants in Separate State Programs starting in FY2000. SSPs contribute only 5.8 percent to the total caseload in an average year.

from 1993 to 2000, and then from 2000 to 2013. In the boom years of the late 1990s, most states had declines of 50 percent or more in caseloads, with Hawaii the lone state to see an increase in caseloads. Over the last decade, however, there is greater divergence across states. Oregon and Maine, for example, had an increase in caseloads of 120 percent or more, while Illinois and Texas had declines of over 70 percent. To be certain, what is most notable in the bottom panel of Figure 5 is the vast majority of states had declines in cash assistance during a very weak economic period, in sharp contrast to the huge increase in food stamp usage.

[Figure 5 here]

In light of the substantial declines in the cash assistance, it is important to document whether the characteristics of the caseload recipients have changed over time. Figure 4 depicted one such change in the shift toward more child-only recipients. Because the goals of TANF were geared more towards the adult recipient, Table 7 presents selected characteristics on the adults in receipt of assistance. It is important to once again recall that this information is only available for those receiving cash assistance, and is not necessarily reflective of the entire adult caseload on non-assistance. There has been a marked downward shift in the age composition of adults on assistance—48 percent were under age 30 in 1996, but this rose to 59 percent by 2010. At the same time there has been a skill upgrading of adults 25 years and older with a 6 percentage point drop in the fraction who are high school dropouts. While the fraction of adults employed in 2010 is double the rate in 1996, there has been a decline over the past decade, and since the fraction unemployed fell as well, there is now a higher percentage not in the labor force. Note that the employment rate of 22 percent in 2010 seems low given the presence of nominal 50 percent work requirements, but some activities that count toward work-requirement goals are not counted as "employment," and in FY2010 38 states had earned a sufficient number of so-called

caseload-reduction credits to reduce their effective work participation rates below 25 percent (TANF Tenth Report to Congress 2013). Over the past decade there has been an increase both in the fraction of adults that are married or never married, and a decline in the fraction separated or divorced. Perhaps consistent with the decline in the average age of an adult recipient, there has been a concomitant increase in the fraction of children under age one receiving assistance. Both trends suggest that cash assistance is reaching a more vulnerable population today.

[Table 7 here]

4. Research on the TANF Program

The thematic emphasis of my review of research on TANF revolves around the four statutory goals of the program of providing assistance to needy families, ending dependence on welfare by promoting job preparation and work, preventing and reducing out-of-wedlock pregnancies, and encouraging the formation of and maintenance of two-parent families. This necessarily leads to a discussion of research on program participation and caseloads, labor supply, welfare-to-work transitions, consumption and saving, health, fertility, child well being, and marriage. Initially Congress was clearly most interested in ending dependence and promoting work with the emphasis on caseload reductions, work requirements, and time limits, but by the time TANF was reauthorized in DRA 2005, there was heightened interest among some on the secondary goals of out-of-wedlock pregnancies and healthy marriage.

While many of the issues overlap that of the AFDC program, the details of the behavioral models under TANF necessarily differ because of programmatic reforms, especially those policies that affect decisions over time such as work requirements, time limits, and expanded asset tests. Moffitt (1992, 2003) provides a comprehensive review of the AFDC models, and thus

I first review the underlying behavioral issues within the general TANF paradigm, followed by a survey of results. Organizing the behavioral issues within the context of the TANF goals necessarily leads to some subjective decisions. For example, I discuss child support and child care under goal (iv) on two-parent families, along with child well being, though these could equally fall under goals (i) and (ii) as policies designed to foster work and reduce dependence.

4.1 Review of Behavioral Issues

Because the goals of TANF aspire to affect a wide array of family outcomes, and the various requirements and incentives that underlie those goals affect budget constraints over time, I begin with a life cycle model under uncertainty. Although much of the research on the TANF program has been in reduced form, there have been some important developments in structural models (Swann 2005; Keane and Wolpin 2002(a,b), 2010; Chan 2013) that followed on the heels of prior static models of AFDC (Moffitt 1983; Hoynes 1996; Keane and Moffitt 1998), and this section relies on this paradigm as an organizing framework. This is useful because it offers the chance to highlight where and how the program is likely to affect decision making over time. Because TANF is restricted to households with dependent children, and historically most adult caretakers have been single women, it is standard to specify the model from the perspective of the mother as the householder, and I follow the literature in this modeling approach.

Specifically, consider a model whereby in each period the woman chooses consumption of medical (S_t) and nonmedical (C_t) goods and services, whether to work and how much (N_t), whether to join TANF (P_t), whether to have a child (F_t), and whether to marry (M_t) in order to maximize the present discounted value of uncertain utility defined over nonmedical spending, leisure (L_t), and the stock of health (H_t). The dynamic optimization problem facing the woman is (3) $V(A_t, K_t, H_t) = U(C_t, L_t, P_t, F_t, M_t, H_t) + \beta E_t[V_{t+1}]$, where K_t is the stock of human capital; $\beta = 1/(1 + \rho)$ is the discount factor based on rate of time preference (ρ); and E_t is the time *t* expectations operator reflecting uncertainty over future income, fertility, marriage, and health. Similar to the health model of Grossman (1972), there is no direct utility from medical spending, only indirectly via its effect on the stock of health.

Income comes from four potential sources: interest income on the prior period assets (r_tA_t) , where r_t is a time *t* interest rate on composite assets; labor earnings (w_tN_t) , where w_t is the before-tax hourly wage rate; non-welfare, nonlabor income, $Y_t(M_t)$, that is a function of marital status and thus may include the earnings of the spouse or other household members; and welfare benefits $TANF_t(f_t(a_t), F_t, w_tN_t, N_t, Y(M_t), r_tA_t, A_t)$, which are a function of the current size and age structure of the family $(f_t(a_t))$, fertility, labor and nonlabor income (including interest income), work, and the stock of assets. Age-adjusted family size and fertility are important as they potentially affect the size of the maximum benefit guarantee and also lead to study of time limits and family caps. Earnings and nonlabor income enter because of the limits for eligibility, and likewise for the stock of assets. This presents opportunities for research on how benefit reduction rates, earnings disregards, and income and asset tests affect the decisions to work, consume, save, and participate. Moreover, work enters separately from earnings to capture the influence of work requirements and training programs.

Income can be spent on nonmedical consumption at price p_t^c , on medical services at the price p_t^s , on tax payments that are assessed to earned and unearned income (but not welfare) and that are affected by the age and size of the family via credits and deductions $R_t \equiv R(w_t N_t, Y(M_t), r_t A_t; f_t(a_t))$, or the income can be saved and carried forward to the next period. Consumption is adjusted by an adult equivalence scale, $e(f_t(a_t))$, to reflect that there are potential economies to scale within the household. The resulting asset accumulation constraint is:

(4)
$$A_{t+1} = (1+r_t) \left(A_t + w_t N_t + Y(M_t) + P_t * TANF_t - \frac{p_t^C c_t}{e(f_t(a_t))} - \frac{p_t^S S_t}{e(f_t(a_t))} - R_t \right).$$

In the ensuing subsections I elaborate on the model and how it can be modified to address specific policies of interest. For parsimony, I do not spell out all possible state variables and instead focus on those most relevant to focal research questions.

Goal 1. To Provide Assistance to Needy Families: Income and Asset Tests

The first goal of TANF is to support needy families, and as such I initially examine how the basic eligibility structure of the benefit—notably income and asset tests—affects the decision to participate in the program. Specifically, based on the model above, the decision to participate in TANF in period t occurs if and only if

(5)
$$P_t^* = V(A_t, K_t, H_t | P_t = 1) - V(A_t, K_t, H_t | P_t = 0) > 0,$$

which says that the family participates in TANF if the value from participation exceeds that obtained from nonparticipation. Implicit in the calculation are the costs of participation that come in the form of time and money (e.g. queuing for benefits and thus missing work) and psychic costs such as stigma (Moffitt 1983). The family must be needy as determined by the gross and net income tests, and the liquid and vehicle asset tests, which implies that the decision to participate is made jointly with work, consumption, fertility, and marriage decisions.

To begin, assume that fertility, marriage, and health are exogenous and thus taken as given. This is consistent with most static models of labor supply and welfare participation, and permits us to focus on the benefit structure. In the presence of income and asset limits that vary by state of residence k in time t the benefit formula for family i can be written as

(6)
$$TANF_{ikt} = G_{ikt} - t_{kt}(w_{it}N_{it} + r_tA_{it} + Y_{it} - D_{ikt})$$
$$w_{it}N_{it} + r_tA_{it} + Y_{it} < Y_{kt}^{gross}$$
$$w_{it}N_{it} + r_tA_{it} + Y_{it} - D_{ikt} < Y_{kt}^{net}$$

$$A_{it} < A_{kt}^{lim}$$

$$Car_{it} < Car_{kt}^{ilm}$$

lim

where the maximum guarantee (G_{ikt}) varies by family size within a given state and year, and labor income, interest income, and other nonlabor income are all subject to benefit taxation (t_{kt}) after deductions that vary by family, state, and year (D_{ikt}). In order to qualify, gross income must be below the state-specific gross limit, net income must be below the net limit, the stock of liquid wealth must be below the state-specific limit, and the market value of the car (Car_{it}) must be below a separate state-specific limit. Notably, states have discretion in whether to count the EITC as nonlabor income (or a resource) in determining the size of the benefit. Most do not count it as income, though most do count it as a resource after several months.

In the absence of TANF (and taxation) and other interest and nonlabor income, the within-period budget line facing the mother is depicted in Figure 6 as the line segment \overline{ae} . The slope of this segment is the real gross hourly wage rate, $-\frac{w_{lt}}{p_t^C}$. With TANF, along with a 100 percent benefit reduction rate and no deductions, the budget constraint facing the mother is the line \overline{Gbe} . If the mother does not work and thus has zero net income, she qualifies for the maximum benefit, *G*. If she combines welfare and work along segment \overline{Gb} then her TANF benefit is reduced dollar for dollar. Once she reaches point *b*, her benefit is zero, and earnings above this point make her ineligible and she returns to her original budget line. As noted previously, all states except Arkansas and Wisconsin have set $t_{kt} = 1$; however, with the exception of the latter two states, all allow earnings deductions of some form. Arkansas and Wisconsin each offer a flat grant amount that goes to zero once the family reaches the income limit in the state, which creates a "notch" in the budget line $\overline{dd'}$. In those two states, TANF has a pure nonlabor income effect of reducing the incentive to work when moving from segment $\overline{ad'}$

to segment \overline{Gd} , and can produce jump discontinuities for those located on $\overline{d'b}$ akin to that found in Medicaid. The more typical scenario is similar to that facing a mother in California where the first \$112 per month are disregarded—segment \overline{Gd} --and thereafter 50 percent of earnings is disregarded along segment \overline{dc} until she reaches the state's income limit. Even though the statutory benefit reduction rate is 100 percent, the effective rate in California is half that amount so that for each dollar earned the benefit only declines by 0.5. Variations on this schedule are found in most states, which helps account for the trend decline in effective rates shown in Figure 1. However, whether this wedge between statutory and effective tax rates stimulates labor supply is not known a priori because of potentially offsetting substitution and income effects among the eligibles. Moreover, the lower effective tax rate makes previously ineligible persons along segment \overline{bc} newly eligible, and in this case the substitution and income effects work in tandem to reduce the incentive to work on the margin. The nonconvexity of the budget constraint Gdc also opens up the possibility that workers just above the income limit at point c may reduce effort and join the program. Of course, once one layers additional transfer programs on top of TANF, some of which may interact with TANF such as food stamps, the budget constraint becomes considerably more complex (Moffitt 2015).

[Figure 6 here]

Cash assistance in TANF offers families insurance against income shocks, which means that there is a consumption floor, <u>C</u>, below which spending will not fall. In a model with uncertainty, this floor on consumption can then result in a reduced need to self-insure for precautionary reasons. Moreover, the explicit limits placed on liquid and vehicle assets may also discourage families from saving (Hubbard, et al., 1995; Powers 1998; Ziliak 2003; Hurst and

Ziliak 2006). Both of these effects can lead to "over consumption" and suboptimal asset accumulation over the life cycle.

[Figure 7 here]

To see the possible implications of the consumption floor on intertemporal consumption choice, consider a simple two-period model in Figure 7. Ignoring equivalence scales and setting the price of consumption to 1, the mother will choose to consume more in periods with low interest rates, and thus the tradeoff between current and future consumption is reflected by the budget segment \overline{adb} with slope – (1 + r). Suppose that in period one the mother has no assets at the start of the period and her only source of income out of which to consume is labor earnings, w_1N_1 . She is notified at the start of the first period that with certainty she will be laid off at the end of the period. In the absence of welfare, her optimal consumption choice is found at point c*, which means that $C_1 < w_1N_1$ and she will carry savings forward to period two so that $C_2 = (1 + r)(w_1N_1 - C_1)$. Now suppose that TANF is available that offers a consumption floor <u>C</u> for those with low earnings. In period 1 her earnings are too high to be eligible, but with no earnings in period 2 she is income eligible. This implies that instead of a potential decline in income flow in period 2 of $(\frac{r*(w_1N_1-C_1)}{w_1N_1} - 1)$ percent, it only falls by $(\frac{r*(w_1N_1-C_1)+TANF_2}{w_1N_1} - 1)$ percent.

However, suppose that TANF also imposes asset limits that make the mother categorically ineligible in period 2 if the stock of wealth ($A_2 = (w_1N_1 - C_1)$) is too high. This asset limit creates incentives to consume more in period 1 than otherwise would be the case in the absence of the limit, and thus the mother may instead opt for point c** in Figure 7. In the more general case of uncertainty over earnings, say because of employment volatility over the business cycle, the life cycle model predicts that the mother will self-insure in order to protect against an income

shock. However, the presence of \underline{C}_2 reduces the need to save for precautionary reasons, and the presence of the asset test only serves to reinforce that disincentive to save.¹¹

State policy choices before and after welfare reform may have further affected the intertemporal consumption and saving decision. For the better part of three decades most states have allowed the real value of the maximum benefit to erode (see Table 5), which means that in Figure 7 \underline{C}_2 has shifted down toward the origin, reducing consumption insurance and making c** suboptimal compared to c*. At the same time states liberalized asset tests (see Table 3), including six states that eliminated it altogether, which means the mother is no longer indifferent between c* and c** because c** results in too low of saving. On top of this there is a potentially important interaction between the asset tests and income tests. Under uncertainty and a 100 percent benefit reduction rate, if the mother knows that any dollar carried over from one period to the next results in a dollar for dollar reduction in benefits then there is little value in saving in the event that she needs to join the program. After PRWORA the statutory tax rate on interest income remains 100 percent, and most states do not provide exemptions to this saving unless it is in a certain class (e.g. Individual Development Accounts are untaxed in most states). However, Ziliak (2007) shows that the effective tax rate on unearned income plummeted after welfare reform, suggesting that there might be more exemptions than official policy would dictate. Moreover, as depicted in Figure 6 and detailed in Table 6, most states increased earnings disregards, making higher income (and wealth) individuals potentially eligible for benefits. Taken together—lower real guarantees, higher asset limits, and higher earning disregards—all

¹¹ The fact that interest income gets taxed by the TANF program also creates a time nonseparability in the household budget constraint, complicating identification and estimation of consumption and labor supply choice. This has not been addressed in the welfare literature, though see Blomquist (1985) for theoretical treatment and Ziliak and Kniesner (1999) for estimates in the general case of income taxation.

suggest that saving and the asset position of the typical mother on welfare should be higher in TANF than under AFDC.

Goal 2. To End Dependence on Welfare: Human Capital, Work Requirements, and Time Limits

The second goal of TANF is to end dependence on welfare by promoting job preparation and work, and to achieve this goal states shifted TANF resources away from cash assistance and toward in-kind job training and other basic skills training, and at the direction of Congress, established work requirements and time limits. What activities count as work-related varies greatly across states and time, but most states allow at least 10 hours of weekly education and training to count toward the established work-related activity requirement (Kassabian, et al. 2013 Table III.B.2). Moreover, a typical guideline is that non-exempt adult caretakers are required to work at least 30 hours per week as soon as possible after entering the system, and no later than after 24 months of benefit receipt.

In the static model of labor supply, minimum work requirements are generally expected to increase aggregate hours among the adult welfare population. Take, for example, a non-exempt single mother with two children living in California in 2012. The budget constraint facing the family is depicted in Figure 8, under the assumption that there is no other nonlabor income. California offers a \$638 maximum monthly guarantee, a fixed monthly earnings disregard of \$112, and a variable earnings disregard of 50 percent that makes the effective benefit reduction rate (brr) 50 percent. This means that the "break-even" income level—the point at which income eligibility stops—is \$1,388 per month (=\$638/0.5 + 112). California requires a minimum of 32 hours of work activity per week, or 128 hours per month. This means that anything to the right of N_{min} is infeasible if she wishes to be on the program. The state minimum

wage in 2012 was \$8 per hour, so that if the mother has a minimum wage job and works the mandated 32 hours per week her monthly earnings are \$1,024. She is income eligible for TANF and qualifies for a benefit of \$182 per month. However, if she earns above \$10.84 per hour and meets the work requirement by spending all her hours in paid employment then she is income ineligible. If she works 40 hours per week then the maximum wage she can receive is \$8.67 per hour in 2012. The implication then is that if the mother is not exempt from work requirements then only very low-wage workers are eligible for TANF, and if they sign up for the program then aggregate hours of work will increase under the work requirement. However, if they do not sign up, but enter the labor force, then we again would expect aggregate labor supply to rise. The exception to this prediction could occur if a sizable fraction do not join TANF and do not work—so-called disconnected mothers—then it is less clear whether the state will realize higher labor supply under work requirements.

[Figure 8 here]

Because the goal of reducing dependence brings time to the forefront, the life cycle model can provide additional insight into how work requirements might affect labor supply choice over time. The key modeling decision is whether to characterize subsidized and/or unsubsidized work, as well as job training and education programs, as "learning-by-doing" skill formation as in Weiss (1972) or as "on-the-job training" as in Ben Porath (1967). As elucidated in Heckman, Lochner, and Cossa (2003) the distinction between the two models is important to our understanding of the effects of policies like work requirements (their application was to the EITC). In the Weiss model, training and work are complements because skill is acquired by virtue of doing your job. Following Shaw (1989), suppose we specify the observed wage (w_t) as the product of a human capital stock (K_t) and the unobserved rental rate on human capital (q_t), $w_t = q_t K_t$. In each period the mother inherits a stock of human capital which depreciates at rate δ_K . New investment occurs on the job through learning-by-doing that depends on hours worked and the level of human capital, $x(N_t, K_t)$. Human capital evolves according to the law of motion

(7)
$$K_{t+1} = (1 - \delta_K)K_t + x(N_t, K_t),$$

and using the wage equation to replace the capital stock in equation (7) yields

(8)
$$\frac{w_{t+1}}{q_{t+1}} = (1 - \delta_K) \frac{w_t}{q_t} + x \left(N_t, \frac{w_t}{q_t} \right).$$

Equation (8) shows that wages tomorrow are a function of wages today along with new human capital investment. The introduction of work requirements pulls nonworkers into the labor force (assuming they remain on TANF), and work today feeds directly into higher wages tomorrow. That is, work requirements create a nonseparability in the lifetime budget constraint in the learning-by-doing model. Returning to Figure 8, note that if the mother would choose to work N_{min} in the absence of TANF, then the introduction of TANF will reduce labor supply and skill formation both from the income effect induced by the provision of the transfer and the substitution effect given that the marginal wage rate in TANF is 0.5*w. Thus, work requirements only lead to higher future wages for those induced to work more in the current period in the learning-by-doing model.

In the standard Ben Porath model, work and skill formation are substitutes in the current period because each hour in training implies a forgone hourly wage. That is, in equation (7) we replace N_t with $(1 - \frac{n_t}{N_t})$, where $\frac{n_t}{N_t}$ is the fraction of time spent in training. Increasing the amount of time in training reduces the fraction of time in work. If the mother would choose N_{min} in the absence of the work requirement, then introducing TANF with the requirement will make training relatively more attractive. This is because the opportunity cost of training is lower under

TANF due to the 50 percent benefit reduction rate lowering the net wage compared to the no-TANF constraint. Moreover, if this human capital development generates higher future wages placing the mother above the break-even income level, then training is that much more attractive. Whether and to what extent work requirements are complements or substitutes hinges on the state of residence and the extent to which training substitutes for work. For example, in Utah if the children are at least 6 years old then the mother is required to work 30 hours per week, 10 of which may be in the form of education. This means that two-thirds of the work requirement is complementary with work, and one-third rivalrous. If the children are under age 6 then the work requirement is 20 hours per week and all hours must be spent in work and thus training is complementary via learning by doing.

Like work requirements, the study of time limits is most conducive in the life cycle framework. As noted in Table 4, the federal lifetime limit for benefits is five years, though in 18 states the limit is either less than five years and/or clients face intermittent limits prior to reaching the maximum. As a consequence the timing of work and benefit receipt is closely linked to the age composition of the children in the family, and ultimately, fertility decisions (Grogger and Michalopoulos 2003; Swann 2005; Chan 2013). The value function in equation (3) now must be modified to include a fourth state variable, the stock of years on welfare, D_t , that evolves as

(9)
$$D_t = D_{t-1} + P(a_t),$$

where D_{t-1} denotes the total number of years on TANF leading up to time period *t*, and $P(a_t)$ is a modified indicator variable of whether the family is on welfare in time *t* as a function of the age composition of the children in the family (a_t). Equation (6), which describes the TANF benefit formula, now requires the additional constraint that $D_t \leq D_{kt}^{lim}$, which says that total time on welfare cannot exceed the state- and year-specific time limit.

Most of the research on time limits have not incorporated asset tests, and thus TANF only distorts saving via its effect as a consumption floor. Indeed, it is generally assumed that the mother survives hand-to-mouth so that there is no self insurance and thus TANF is the sole means of support in the event of a negative employment shock. This means that the timing of benefit receipt hinges crucially on the age of the youngest child. Since eligibility ends when the age of the youngest child reaches age 18, this means that the five-year time limit is not binding if the youngest child is age 13 or older (but this is raised to age 16 and older in the five states with a two-year or less time limit). However, if the child is younger than age 13 then there are incentives for the mother to "bank" her benefits. That is, we expect counter-cyclical participation in TANF to be greater in families with young children compared to families with only adolescents. Holding business-cycle conditions constant, we also expect labor supply to be higher when the child is younger.

This benefit-banking effect is confounded, however, in the presence of work requirements, learning-by-doing, saving, and asset tests. First, with work requirements there are technically no periods with nonemployment coupled with TANF benefits since work, or at least work-related activities, are a prerequisite of benefit receipt. The exception is that in most states mothers are exempt from work requirements when the child is young (usually age 1 and under), and this creates countervailing incentives to deplete benefits when the child is young. Second, as the benefit-banking model predicts greater work effort when young, this also means that there will be future wage growth via learning-by-doing à la equation (8), and this wage growth could render the family income ineligible when it comes time to apply. Third, if the mother saves then we expect self-insurance to be greater when the child is young under benefit banking because this is the period of highest labor supply, though this self insurance will be attenuated by the consumption floor of TANF. Moreover, with asset tests, this self insurance may render the family ineligible when the time comes to join the program. All told, we expect benefit banking effects to be strongest in states with relatively lenient work requirements, income limits, and asset limits. Because child-only cases are not subject to time limits, benefit banking should not apply to these assistance units.¹²

Goal 3. To Prevent and Reduce Out-of Wedlock Pregnancies: Family Caps and Maternal Health

The rise of out-of-wedlock childbearing came to national attention with the publication of the Moynihan Report in 1965 (U.S. Department of Labor 1965). The report focused on the challenges facing the black family, where it was noted with alarm that nearly one in four black children were born out-of-wedlock in 1963. This trend continued over the next two decades, rising to 60 percent by the early 1980s, and today stands at 71 percent (Child Trends 2014). At the time of the Moynihan Report, only 4 percent of births to white mothers were out-of-wedlock. This percentage increased dramatically by the early 1980s, and by 2013 was over 7 times the rate five decades earlier with about 30 percent of births outside of marriage. The comparable rates in 2013 are 53 percent among Hispanics and 17 percent among Asians and Pacific Islanders.

This significant change in child bearing led some commentators to lay blame squarely on the doorstep of AFDC (Murray 1984). The critique of the program focused on the fact that since eligibility was restricted to those families with children, and benefits were provided with relatively few strings attached, it created a viable option for child birth outside of marriage.

¹² The other approach to avert the time limit is via the diversion program, if available in the state. Two-thirds of states have formal diversion programs, and only 3 of those count the payment against the life time limit.

Indeed, the structure of the benefit formula is such that $\frac{\partial TANF_t}{\partial Y(M_t)} < 0$; that is, income from a spouse (or noncustodial parent via child support) increased net income and thereby reduced the size of the benefit, all else equal. At the same time, because need standards and thus potential benefits increased with the size of the family unit, $\frac{\partial TANF_t}{\partial f(a_t)} > 0$, there were implicit incentives to have more children.

As shown in Figure 3, 6 percent of total TANF and MOE spending in 2012 was targeted to programs aimed at reducing out-of-wedlock child birth. Some of these efforts are "sticks" and some are "carrots." The most obvious stick is the introduction of family caps. Nearly 40 percent of states at some point under TANF have introduced family caps that limit or restrict the size of the benefit increase when an additional child is born so that effectively $\frac{\partial TANF_t}{\partial f(a_t)} = 0$. In the context of the asset accumulation constraint of equation (4), lifetime wealth will fall with an additional child on TANF because the benefit remains fixed, but equivalized consumption, $\frac{p_t^C C_t}{e(f(a_t))}$, increases. This negative wealth effect in turn should increase labor supply, partially offsetting the loss in assets, but typically well below a full offset. Many states also imposed new behavioral rules that increase the effective cost of children, and therefore reduce the demand. These rules include requiring that the children meet attendance quotas at school and/or a minimum Grade Point Average, that the children receive all required immunizations, and that the children meet health screening requirements.

Most of the spending on efforts to reduce out-of-wedlock births are carrots, coming in the form of home visiting programs, education programs, media campaigns, family planning, abstinence education, and youth services (Green Book 2008). Within these categories, many can be characterized as investments in mothers' health. This is underscored further when considering

the 15 percent "other" spending category in Figure 3, which includes, among others, mental health services, drug and alcohol addiction treatment, and domestic violence counseling and prevention. Returning to the life cycle model in equations (3) and (4), which includes the stock of health, assume that in each period the mother inherits a stock of health capital which depreciates at rate δ_H . Health can be replenished by devoting leisure time (L_t) to exercise, purchasing medical services (S_t), and receiving in-kind services from TANF. Health capital then evolves according to

(10)
$$H_{t+1} = (1 - \delta_H)H_t + y(S_t, L_t, TANF_t),$$

where $y(L_t, S_t, TANF_t)$ is the health investment production function that is akin to the standard Grossman (1972) model but modified to include the services received in TANF.¹³ Equation (10) makes explicit that participation in TANF can offer an additional channel to improve lifetime well being beyond providing a consumption floor via health promotion. These health services may interact positively with human capital, thereby increasing lifetime earning potential.

Goal 4. To Encourage the Formation and Maintenance of Two-Parent Families: Child Support and Child Well Being

In the original ADC program, benefits were confined to the child, and then the 1950 amendment to the Social Security Act allowed the mother to be part of the assistance unit as well (technically the caretaking parent). This was then extended, at state option, to the second natural parent with the advent of the AFDC-UP program in 1961. In the late 1960s there were several Supreme Court decisions that implicitly extended eligibility to cohabiting couples. One decision eliminated so-called man-in-the-house rules that disqualified otherwise eligible mothers from receiving AFDC because of co-residence with a man who was not the natural father of the child,

¹³ The concept of leisure in this framework differs from leisure in the standard labor supply model, where leisure represents nonmarket time. The Grossman (1972) model separates total time into time for work, time for health, time for producing the household good, and time for sickness.

while another decision ruled unconstitutional the inclusion of income from the cohabiting male in benefit determination without proof that his income was used to support the mother and children (Moffitt, et al. 1998). The Family Support Act of 1988 extended the 1961 Amendment by no longer making the AFDC-UP optional and mandated all states implement it by 1990. Each of these changes was designed to promote family unity, and this goal was codified as one of the four pillars of TANF.

The promotion of marriage (or at least cohabitation) and family stability is built on the belief, backed up by evidence, that children (and adults) do better on average in two-parent families than in single parent families—higher incomes and wealth, and lower poverty and mortality (Waite 1995)—and ultimately from the policymakers perspective, lower transmission of welfare across generations.¹⁴ This is most readily captured in the framework of the Becker-Tomes (1979) model of intergenerational mobility whereby during childhood the parent(s) allocates income between their own consumption and investment in the human capital of the child. The more income that is invested in the child the more economically mobile the child will be in adulthood. In a simple regression context we get

(11) $lnTANF_{Adulthood}^{Child} = \beta lnTANF_{Childhood}^{Parent} + X\theta + u$,

where $lnTANF_{Adulthood}^{Child}$ is the natural log of TANF income that the child receives in adulthood, $lnTANF_{Childhood}^{Parent}$ is the natural log of TANF income that the parent receives while the child is growing up, X is a vector of family and child control variables, and u is an error term. The coefficient β is the intergenerational correlation of TANF incomes—as $\beta \rightarrow 0$ the intergenerational link of welfare is broken. Children growing up in two-parent families, all else

¹⁴ Whether marriage causes these positive outcomes or whether there is self-selection of better qualified parents into marriage is still an active line of inquiry.

equal, receive proportionately more investment in terms of time and money in their human capital, and thereby have greater odds of economic mobility in later life.

In terms of the life cycle model of Equations (3) and (4), in any given period the mother will choose to marry if and only if the value function while married exceeds that not married. Whether or not she also combines marriage with TANF will be made with the knowledge that the income and asset limits are the same whether she is married or not, and given that the prospective spouse is expected to bring both income and assets into the family, this will make eligibility for TANF less likely. Moreover, her spouse's income, $Y(M_t)$, will count against the size of the benefit if they qualify. Under TANF, depending on state of residence, she may not qualify for benefits if she is married (New Hampshire and North Dakota), or eligibility may be confined to only those fathers with less than full-time attachment to work (Maine, Mississippi, South Dakota, and Tennessee). These features create disincentives to marry, or at least to not marry "well."

In most states the resources used to meet this goal were directed toward responsible fatherhood initiatives, which often are in the form of employment and training services for noncustodial fathers (Green Book 2008). The idea here is that if that the father has steady employment and earnings, there will be a greater chance of regular child support payments to assist the family, and that there will also be positive role model effects passed from father to child (e.g. a lower β in equation (11)). Under AFDC only \$50 per month in child support was disregarded from the benefit (known as the child-support pass through) and the remainder was retained by the state and thus effectively taxed at 100 percent. This high tax rate created strong disincentives both to paternity establishment and to formal child support, conditional on paternity being established. This disincentive is exacerbated by the fact that recipients are

required to surrender their child support income to the state, and then states determine how much to pass through. States adopt this policy in part because they are required to return a percentage (based on the state's FMAP) of this income to the federal government (Kassabian, et al. 2013). After PRWORA, seven states retained the basic \$50 pass through, seven others raised the pass through to anywhere between \$75 and \$200 per month, and seven additional states no longer explicitly count child support (100 percent pass through). The remainder adopted some other policy, including not passing through any child support. In short, only a small number of states made a concerted effort to align their TANF program with enhanced child support payments. This cross-state variation offers an opportunity to test whether child well being is higher among the TANF population in those states with more generous pass through policies.

Arguably the most significant investment in child well being under TANF is the expansion of child care subsidies. As documented in Figure 3, 12 percent of TANF funds were directly spent on child care in 2012 (1 percent on cash subsidies; 11 percent in-kind), and an additional 4 percent of TANF funds were transferred to the Child Care Development Fund. The latter are less restrictive in terms of income eligibility and thus are more likely to assist children in two-parent families than TANF child-care funds (though in both cases the subsidies are only for children under age 13). Whether received directly as cash, or in-kind, child care assistance can be viewed as a wage subsidy, such that the net wage of the mother on TANF is $w_t(1 - brr_t + t_t^c)$, where t_t^c is the effective hourly subsidy rate from child care. The child care subsidy attenuates the disincentive to work from the benefit reduction rate, which should increase labor force entry and may also increase hours of work provided that the substitution effect dominates the income effect. The evidence from the child-care literature seems to confirm both of these predictions (e.g. Berger and Black 1992; Blau and Currie 2006; Tekin 2007). Moreover, this

literature shows that children generally do better in model, center-based care than informal (home-based) care on a host of cognitive and non-cognitive measures (Morris, et al. 2009; Blau and Currie 2006; Bernal and Keane 2011). However, it was estimated that in FY2009 only 1 in 6 children eligible for CCDF or TANF childcare received assistance (TANF Tenth Report to Congress 2013). This helps explain why in calendar years 2012-2013, out-of-pocket child care costs ate up nearly 20 percent of the median annual earnings of single mother families with children under age 5, and upwards of one-third in states like Massachusetts (Ziliak 2014).

4.2 **Review of Results**

Across the spectrum of programs in the social safety net, AFDC was historically the most heavily researched. This stemmed in part because it was the primary means of cash assistance for low-income families with young children from the 1960s through the 1980s, coupled with the fact that it was one of the few programs that provided cross-state variation in key design parameters such as the maximum benefit guarantee and effective benefit reduction rates that were crucial for non-experimental evaluation. In the aftermath of welfare reform, research on the program exploded as depicted in Figure 9. This research activity persisted for a full decade after reform and has only tapered off in recent years. The figure only captures part of the story, however, because it only covers peer-reviewed books and journal articles and omits the scores of unpublished working papers as well as technical reports written by evaluation firms, think tanks, and government agencies (and undoubtedly published works overlooked by the author). The growth in research was spurred on by the vast breadth of reforms, funding for demonstration projects, the advent of new datasets such as the Three City Study and Fragile Families, annual conferences such as Association of Public Policy and Management, National Association of Welfare Research and Statistics, and the Welfare Research and Evaluation Conference, and the democratization of research effort. The research during the AFDC era was heavily dominated by economists, and while economists continued in this tradition after welfare reform, there was a large influx of new research by demographers, development psychologists, political scientists, sociologists, and social workers pulled in by opportunity to study outcomes beyond participation decisions and labor supply such as child development, health, immigration, and the political economy of program implementation.

[Figure 9 here]

In this section the primary focus is on TANF research not covered in Moffitt (2003), though there will be some overlap of material as well as from the surveys of Grogger and Karoly (2005) and Blank (2009). It is not possible to review all the papers identified in Figure 9; instead, emphasis is on a subset of papers representative of the broad range of research topics spanning participation and caseloads, labor supply and welfare-to-work, income and poverty, consumption and saving, health, fertility and marriage, and child development.

4.2.1 Participation and Caseloads

The adoption of AFDC waivers that introduced time limits, work requirements, sanctions, expanded earnings disregards, and asset limits in the early 1990s spawned a flurry of research focused primarily on the decline in welfare participation between 1993 to 1996 as this was the key policy outcome of interest at the time (Council of Economic Advisers 1997; Figlio and Ziliak 1999; Moffitt 1999; Bartik and Eberts 1999; Ziliak, et al. 2000; Blank 2001). Research on participation prior to this had mostly emphasized the roles of demographic factors, along with cross-state variation in maximum guarantees and effective tax rates, in predicting welfare use, and relied on cross-sectional data (Barr and Hall 1981; Moffitt 1983; Robins 1986; Hoynes

1996). When a time dimension was incorporated, it was most often in the context of estimating the determinants of welfare spells (Blank 1989; Fitzgerald 1991; Hoynes and MaCurdy 1994).

Economy-vs-Policy Debate

This new research took a more macro approach, utilizing administrative data on the number of AFDC cases (or recipients) per capita in each state over time to estimate the relative roles of the business cycle versus welfare waivers in accounting for the large decline in participation. These nonexperimental studies took advantage of the differential timing and types of welfare waivers implemented by states, along with state and regional differences in business cycles as measured by unemployment rates and/or employment growth. There was agreement that the strong macroeconomy in the mid 1990s was the most important factor behind the decline in caseloads, but there were considerable discrepancies across studies in whether and to what extent welfare waivers affected the decline.

For example, the CEA (1997) and Blank (2001) attributed between a quarter and a third of the decline to welfare waivers, while Ziliak, et al. (2000) attributed none. Ziliak, et al. found that states with time limits and behavioral responsibility waivers experienced declines in caseloads, while other states with work requirements and expanded disregards and asset limits had increases, and in the aggregate they canceled out. The studies differed in several respects. The CEA and Blank each used annual state panel data, while Ziliak, et al. used monthly state panels. Moreover, the former studies only admitted dynamics in the model via lags of the business cycle (the CEA also had policy lead variables), while the latter study included lags in both the business cycle measures and the dependent variable (log of per capita caseloads). In their reconciliation study, Figlio and Ziliak (1999) attributed the majority of the difference to the inclusion of lagged caseloads, which were found to be highly significant both economically and statistically. Specifically, lagged caseloads had the effect of heightening the influence of the business cycle and attenuating the influence of policy. In most of the caseload studies around 25 percent of the variation was left unexplained by the business cycle and state welfare policy choices. The remainder was attributed to other policies such as the expansion of the EITC that made work more attractive relative to welfare (Meyer and Rosenbaum 2001) and enhanced child-support enforcement (Huang, et al. 2004).

In the wake of these early studies several others followed up with a deeper examination of caseload dynamics. Grogger, Klerman, and Haider (2003) used household-level data from the SIPP to ask the question of whether the decline in the 1990s came via reduced entry and/or increased exit. That is, at any given time the caseload is a function of the stock of caseloads from the prior period along with the flows on and off between periods. They found that exits increased during the 1990s, but nearly half the decline was driven by a reduction in entry. Hoynes (2000), Klerman and Haider (2004) and Haider and Klerman (2005) used rich micro caseload data from the state of California to examine caseload flows. Because the data come from a single state they were not able to address the economy-vs-policy issue directly, and instead focused on the local economy alone. Hoynes found that local labor demand conditions at the county level—lower unemployment, higher employment per population, higher average wages—were a key driver of exits off AFDC spells.

Klerman and Haider utilized the data to estimate Markov-chain models to pin down the proper dynamic structure of the caseload. Their theoretical model predicted that static models need to include many lags of regressors along with interactions among them to be consistent with the Markov model, suggesting that the models of the CEA and Blank were insufficient in their controls for dynamics. As for dynamic models, Klerman and Haider found that a single lag of the dependent variable is also not sufficient, and these models must include long lags of explanatory variables for the model to be consistent with duration dependence in welfare spells. For example, Ziliak, et al. included three lags of the dependent variable, six lags of the economy, and four lags of welfare waivers in their model, using the Schwarz criterion to select the lag structure. Applying their results to California, Klerman and Haider found that local unemployment rates explained about 50 percent of the decline in caseloads, about double the estimate they obtain from a standard static model like the CEA. Haider and Klerman go further in finding that the caseload decline in California was due more to declining entry rates than exits. Frogner, Moffitt, and Ribar (2009) use longitudinal data from The Three City Study, which followed 2,400 low-income women with children from 1999-2005 in Boston, Chicago, and San Antonio, and found that exit rates from TANF were high, and that entry and re-entry rates were very low, consistent with Haider and Klerman.

Most of the participation research examining the economy versus policy debate focused on the years leading up to passage of PRWORA. Grogger and Karoly (2005), in their survey of the literature, concluded that of those studies examining the first few years after PRWORA, TANF policies accounted for about 20 percent of the decline in caseloads, and that the macroeconomy remained the main driver. There were a couple of exceptions using more recent data. Fang and Keane (2004) used repeated cross-sections of the CPS from 1980-2002 to estimate a host of welfare reform policies interacted with several household demographic characteristics on the decision to participate in AFDC/TANF. They found that policies mattered much more than the economy for the 1993-2002 period, especially work requirements. However, they only included static controls for the economy (state unemployment rate, average wage at the 20th percentile) and thus fall into the critiques of Ziliak, et al. (2000) and Klerman and Haider (2004). Danielson and Klerman (2008) used monthly state caseload data from 1990-2005, focusing on time limits, diversion, sanctions, and financial-incentive policies. While they do include a lag structure for both the macroeconomy and welfare policies, they do not include lags of the dependent variable. However, they do a more careful job of accounting for differential reporting of separate state programs in construction of the dependent variable caseloads. They found that from 2000-2005 welfare policies accounted for more of the caseload change than the economy; however, over 80 percent of the variation is left unexplained by these two factors. This was not the case in the first generation caseload research on the waiver period. Perhaps part of the weakening of the models stems from the fact that take-up rates of cash benefits have plummeted from 79 percent in the last year of AFDC to 36 percent in 2007 (Loprest 2012), which itself is a likely policy outcome that is not adequately captured. Moreover, with the surge in child-only cases, many on the rolls are not subject to the same macroeconomic and policy forces as under AFDC when it was the norm for both the adult and child to be on assistance.

There are only two caseload studies that I am aware of that include years of the Great Recession. Bitler and Hoynes (2010) use both monthly administrative data on state caseloads from 1980-2009, as well as annual survey data from the Current Population Survey, to examine the effect of the economy and welfare reform on AFDC/TANF (along with other outcomes). Their estimates from static models suggest that TANF (assistance) caseloads are no more responsive to business-cycle conditions after welfare reform, though in some specifications the caseload is less responsive to the economy. In a follow-up analysis, Bitler and Hoynes (forthcoming) extend the data through 2012 where they confirm the lack of responsiveness of TANF to the Great Recession, especially expenditures, and as a consequence extreme poverty is more cyclical than in past recessions. They do not offer a decomposition analysis of economyvs-policy, which is perhaps the correct choice given the identification challenges of evaluating TANF as a bundle (see below). However, it remains an open question as to whether the models with the additional variation induced by the Great Recession can account for changes in TANF more akin to the waiver studies, or whether the more pessimistic assessment of Danielson and Klerman (2008) carries the day.

The Bitler and Hoynes (2010, forthcoming) papers also shed light on a related, but distinct, literature that examines fiscal-federalism incentives facing states in the provision of social assistance (Gramlich and Laren 1984; Moffitt 1990; Chernick 1998; Chernick and McGuire 1999; Powers 1999; Ribar and Wilhelm 1999; Brueckner 2000; McGuire and Merriman 2006). Specifically, under the basic block grant of TANF, states are responsible for the full marginal cost of additional spending once the grant is exhausted, whereas under the matching-grant system of AFDC they only covered a fraction of additional spending as determined by the FMAP. Thus, under TANF the "price" of welfare is higher, and all else equal, we expect state spending on cash assistance to fall relative to AFDC. At the same time, states that rely heavily on a progressive income tax to support spending tend to have more volatile revenue streams, and in the event of a downturn, revenues fall creating an income effect that also depresses spending on welfare just as the need for assistance accelerates. The price effect suggests that there should be a (secular) decline in state spending on cash assistance after welfare reform, while the income effect suggests that states should be less willing to increase spending during recessions under the block grant. Chernick (1998) predicted such effects, though the early evidence in McGuire and Merriman (2006) was not conclusive. Part of this might be due to the fact that states accumulated surpluses in the first half dozen years after welfare reform and could carry these forward to future fiscal years, and part due to state MOE requirements. McGuire and

Merriman also argued that TANF has become an increasingly smaller share of state spending and thus is less elastic as a consequence. However, with an additional decade of data the evidence in Bitler and Hoynes is quite persuasive that both price and income effects have lead to a reduced responsiveness of TANF to economic need compared to AFDC. That said, the financing models focus on state spending, and since Bitler and Hoynes did not direct their attention to this literature, they did not separate out state-only spending from spending commingled with federal dollars, and thus future work should separate these funding streams to more accurately examine the model predictions from block grants.

Specific Policy Studies

One of the challenges facing evaluation of TANF as a complete package is that the policy was implemented across all states within roughly 18 months. This is distinct from the waiver period when policies were implemented over a four-year period, with some states not adopting waivers at all, and thus offering more variation to separate the effect of the economy versus policy on participation (Bitler, et al. 2003). While most of the first-generation papers estimated disaggregated policy effects—sanctions, time limits, work requirements, incentives—and some included interactions between the economy and policy (e.g. Bartik and Eberts 1999; Ziliak, et al. 2000) or the economy and demographics (Moffitt 1999), this was crucial for identification in the TANF era. That is, it became necessary to either utilize qualitative differences in the stringency of program rules or to exploit variation over the business cycle or demographic groups to identify policy effects post PRWORA. This in turn makes it more challenging to aggregate up to a total "welfare reform effect," leading some to instead focus on the contributions of individual policies on the decline via counterfactual simulations (Fang and Keane 2004; Danielson and Klerman 2008).

The most prominent of these policy-centric papers are on time limits. For example, Grogger (2003, 2004) implemented a reduced-form version of the dynamic model proposed by Grogger and Michalopoulos (2003) using data from the CPS from 1979 to 2000. He exploited the prediction of the federal five-year lifetime limit that single mothers with only older children (age 13 and older) should exhaust their benefits more rapidly than mothers with younger children since the latter have an incentive to "bank" their benefits in case of a (more) rainy day in the future. He implements this by interacting the time limit variable with a variable that equals 0 if the youngest child is age 13 or older and equals the deviation of the age of the youngest child from 13 if the child is under age 13. Grogger finds no overall effect of time limits on welfare use, but significant effects on the age-dependent interaction term such that a mother whose youngest child is 10 years old reduced participation by 2 percentage points. His estimates suggest that time limits accounted for about one-eighth of the decline in welfare participation between 1993 and 1999. Mazzolari (2007) extended the Grogger model to account for the fact that his specification is valid only at the point of implementation, but as time passes one also must control for the stock of remaining benefits (see equation (9) above). She also attempted to disentangle behavioral from mechanical effects of the limits (Ashenfelter 1983), the latter of which can arise from state variation in exemptions from the limits. Using data from the 1990 through 2001 panels of the Survey of Income and Program Participation (SIPP), she estimated that from 1996-2003 time limits reduced welfare use by 25 percent, 5 percentage points of which (i.e. 20 percent of the total) was from behavioral effects. This is perhaps not surprising in that Loprest (2012) reports that only 2 percent of cases were closed in FY2009 for reaching the time limit.

The forward-looking aspects of time limits have also led to a few attempts at estimating structural models of life cycle behavior (Keane and Wolpin 2002b, 2010; Swann 2005; Fang and

Silverman 2009; Chan 2013). These papers are distinct from the others in the literature because the welfare decision is made jointly with labor supply decisions, and perhaps marriage and fertility choices. As such they will be mentioned in later sections under those respective topics. All the papers use exclusively pre-welfare reform data (Panel Study of Income Dynamics from 1968-1992 for Swann; National Longitudinal Survey of Youth from 1979-1991 for Keane and Wolpin and Fang and Silverman) except for Chan, who uses data both pre- and post-welfare reform (SIPP panels for 1992, 1993, and 1996). However, by formally modeling the structural preferences and budget constraints facing the women they are able to conduct detailed counterfactual simulations of how behavior likely changed under TANF. For example, Swann (2005) estimated that a five-year time limit leads to a 9 percent reduction in the caseload, but a 60 percent reduction in the number of person-years on welfare, one-third of which is a behavioral response from forward-looking behavior. Chan (2013) estimated a smaller 37 percent reduction in person-years within ten years of implementation; however, he also attributed at least a third of this effect to a behavioral response. Thus, incorporating forward-looking behavior has the effect of increasing the importance of time limits on the welfare decisions of mothers.

Beyond time limits, sanctioning policy took renewed prominence in the research literature. For example, Wu, et al. (2006) used administrative longitudinal caseload data spanning 1997-2003 from the state of Wisconsin to examine the extent and consequences of sanctioning policy. They found that nearly two-thirds of women on welfare faced a noncompliance for work requirement sanction over a 4-year period, but because most of the sanctions were short-term and partial, the most common transition for this group was back to welfare within a month or two after a sanction. They also found that Hispanics and African-Americans were more likely to be sanctioned than whites. This racial gap in sanctioning was also found in Schram, et al. (2009), who used a hypothetical "audit study" of case managers in Florida. Their audit study is unique in this literature, and involved a Web-based survey of Florida Welfare Transition case managers whereby the managers were presented with various ruleviolation scenarios and randomly assigned client characteristics. The authors found that African-American mothers, more so than Latinas, were likely to face sanctions compared to white mothers. This result was corroborated in actual administrative data outcomes in Fording, et al. (2007), especially for longer spells on welfare where black clients faced sanction rates of 22 to 35 percent higher in month 9 of a spell compared to white clients.

PRWORA limited access to assistance for legal immigrants arriving after passage of the law until after five years of residence, and left it to state discretion on whether current legal immigrants would be eligible (illegal immigrants have always been denied benefits). This provision stemmed from a concern that the large increase in low-skilled immigration in the 1980s and early 1990s might be in response to generous welfare benefits (Haskins 2009). Such concerns with welfare migration have a long history with welfare, starting at least with the Law of Settlement and Removal of 1662 whereby local officials in England could force individuals and families to return to their home parishes if they became dependent prior to proof that they contributed to the well being of the community (Hansan 2011). The evidence on whether there is such endogenous immigration or internal migration in response to welfare generosity in the U.S. is mixed (Borjas 1999; Gelbach 2004; Kaushal 2005; McKinnish 2007; Kennan and Walker 2010).

Several studies examined trends in welfare participation among immigrants before and after passage of PRWORA, including testing whether there was a "chilling effect" on participation among immigrants, i.e. a voluntary withdrawal from the program even though eligible owing to misinformation or perhaps fear (Fix and Passel 1999; Lofstrom and Bean 2002; Haider, et al. 2004; Kaestner and Kaushal 2005; Capps, Fix, and Henderson 2009). While most of the studies examining the early years after reform found evidence that immigrants reduced participation more than native-born after welfare reform, this may be due more to differential response of immigrants to the strong labor market of the late 1990s (Lofstrom and Bean 2002; Haider, et al. 2004). However, in a recent paper, Bitler and Hoynes (2013) compared immigrant and native-born participation rates in TANF in 2008-2009 to AFDC rates for comparable groups in 1994-1995, and while the difference-in-difference estimates suggest lower participation rates of 2-3 percent among immigrants than natives, the differences are not significant.

Because there are so many possible policy variables that capture different aspects of welfare reform, attempts to include them all, or even a sizable subset, has been met with little success owing to collinearity problems. As a consequence, some have attempted to summarize the policies in a more parsimonious manner, such as the aggressiveness of the reforms ranging from 'lenient' to 'severe' (Ellwood 1999; Meyer and Rosenbaum 2001; Soss, et al. 2001; Grogger and Karoly 2005; McKernan, et al. 2005; De Jong, et al. 2006). Ellwood (1999) proposed a measure of aggressiveness that captured the changing odds that people of a given earnings level in a given state would receive public assistance. To construct the measure he used data from the Current Population Survey over the period 1984–1992 to estimate a probit model of AFDC participation among single parents in each state as a function of age, education, race, state unemployment, earnings, and a linear trend. Then he predicted the likelihood of receiving aid using the same demographic and state level variable but with data from the 1997 and 1998 CPS under the proviso that AFDC program rules were the same as in the base period of 1984–1992. The difference between the actual and predicted decline in AFDC participation between

1991–1992 and 1997–1998 is used as the metric of aggressiveness.

Meyer and Rosenbaum's (2001) approach consists of whether (1) the real AFDC benefit fell at least 25% between 1986 and 1997; (2) whether the state imposed a time limit waiver; (3) whether the state imposed full family sanctions for failure to comply with JOBS requirements; and (4) whether any persons were terminated for failure to meet a requirement under AFDC waivers. States that satisfied at least three of the four criteria were defined as most aggressive. Grogger and Karoly (2005) considered several alternative metrics of aggressiveness, including where (1) a state is deemed aggressive if it had one or more waivers implemented between 1992 and 1996 (see their Table 4.1), (2) a state is deemed aggressive if it had three or more waivers implemented between 1992 and 1996, or (3) a state is deemed aggressive if all four studies on state sanctions policies summarized in their Table 4.2 agree that the state's (full family benefit) sanction policy is stringent during the 1992 to 1996 period. De Jong, et al. (2006) coded 78 policies from the Welfare Rules Database from lenient to stringent, and then applied factor analysis that identified 15 leading policies. In a bid for greater parsimony they conducted a second-order factor analysis that resulted in three broad categories of policies: eligibility requirements, behavioral responsibilities, and eligibility limits and exemptions.

There have only been limited attempts to use these indices to predict welfare caseloads. The Council of Economic Advisors (1999) updated their earlier study to include two years post-TANF and found that states with more stringent job sanctioning policies had larger declines in caseloads than those employing more lenient policies. Schmidt and Sevak (2004) used data from the CPS for calendar years 1987-1996 and found that states that implemented more aggressive reforms saw a 21 percent increase in participation in Supplemental Security Income (SSI), suggesting that states partially shifted burden from their budgets to the federal budget. Cadena, et al. (2006) used data from the CPS for the years 1994 to 2003 to construct three-year moving averages of TANF participation among single mothers with at least one dependent child and with no more than high school for each state. They then estimated the effects of the De Jong, et al. indices on participation, finding that they have no predictive power once one controls for state fixed effects. They present some suggestive evidence that the lack of power in the De Jong, et al. measure might be due to its omission of the AFDC/TANF maximum benefit guarantee, which has historically been a key proxy of state generosity.

4.2.2 Labor Supply and Welfare-to-Work

Concomitant with the surge of research on participation in TANF was research on employment. This follows hand-in-hand with the second goal of TANF to end dependence and promote work. While several studies were national in focus, much of this research was fueled by area studies on welfare leavers or eligibles from demonstration projects, focused surveys, and administrative data. The demonstration projects, several of which were conducted during the welfare waiver era, included the California Greater Avenues for Independence (GAIN), Florida's Family Transition Program (FTP), Connecticut's Jobs First, Minnesota's Family Investment Plan (MFIP), Milwaukee's New Hope program, and Wisconsin's Child Support Demonstration Evaluation (CSDE).¹⁵ The most prominent focused surveys were fielded after welfare reform, including the Three-City Study, the Fragile Families and Child Well Being Survey, and the Women's Employment Study (WES). And in a relatively new turn of events, several states such as California, Florida, Georgia, Illinois, Maryland, Michigan, Missouri, New York, North and South Carolina, Tennessee, Washington, and Wisconsin opened up their administrative records

¹⁵ Canada's Self-Sufficiency Project (SSP) was conducted at the same time. SSP was a randomized control trial conducted in New Brunswick and British Columbia that provided earnings supplements (akin to the U.S. EITC) for up to three years to long-term welfare recipients if they found full-time work and left welfare within one year of random assignment. 36 percent of the treatment group found full-time work, and had an employment rate that was 61 percent higher than the control group at the three-year follow up. See Michalopoulos, et al. (2002) for details.

to academics and evaluation firms to evaluate how former welfare recipients were faring in the labor market. In this section I first discuss observational studies, both reduced-form and structural, followed by leavers studies and demonstrations. These research strands follow rich histories on AFDC starting in the 1960s as national household surveys such as the CPS, the NLS, and PSID were coming on line at the same time as the negative income tax experiments were fielded in Gary, Indiana, New Jersey, and Seattle and Denver (SIME/DIME).

Employment

In the wake of welfare reform, most of the new observational studies on employment with a national focus were reduced form, and they relied heavily on the pre-TANF period for identification. Instead of emphasizing the effects of maximum benefit guarantees and benefit reduction rates as was typical with the earlier AFDC research, these studies examined the overall effect of welfare waivers (or TANF) on the extensive and intensive margins of employment. Moffitt (1999) used CPS data from 1977-1995 and found that only less-skilled mothers (i.e. those with a high school diploma or less) responded to welfare waivers. Mothers who dropped out of high school increased work by 68 hours annually, while those with a diploma increased annual hours by 41 hours. Schoeni and Blank (2000) extended the CPS data four more years through 1999, and found that waivers increased employment rates high school dropout mothers by 2 percentage points on a baseline rate of 53 percent, the number of weeks worked increased by one week, and weekly hours increased by one (the mean hours per week were 16). They found no labor supply response among the less skilled in the three years after TANF was passed.

Grogger (2003) used the same CPS data and a slightly modified model as he also included the time limit and time limit interacted with the age of the youngest child, along with the overall reform variable and controls for the EITC. He found that employment rates overall increased by 2.6 percentage points by non-time-limit welfare reforms, and the time limit boosted the employment rate of mothers with children by 0.34 percentage points for each year the child was under age 13. And while time limits did not boost annual weeks worked, the non-time-limit reforms did by about 2.6 weeks. Kaushal and Kaestner (2001) use just four years of CPS data spanning 1995-1999 and employ a difference-in-differences estimator. They found that employment rates of less-skilled unmarried mothers increased about 7 percentage points in response to time limits, or about 14 percent over the baseline. This larger effect from time limits (compared to Grogger may result both from a different specification of time limits (Kaushal and Kaestner only use a dummy variable, not a direct function of age of child as in Grogger) and their use of a comparison group of married women, which may impart bias if there are endogenous marriage responses to welfare reform. Fang and Keane (2004) attribute more of the growth in employment between 1993 and 2002 to the EITC and macroeconomy than welfare reform, but still a sizable 27 percent to the combined effects of work requirements (17 percent) and time limits (10 percent).

Meyer and Rosenbaum (2001) employ a quasi-structural approach to estimating employment rates, again using CPS data but for years 1984-1996. Their approach is considered "quasi-structural" because they model the employment decision as a function of the difference between expected income from work and from nonwork, where income is specified as a detailed function of the parameters governing the tax and transfer system and thus affecting the woman's budget constraint. They also use a difference-in-differences estimator, but in this case use single, childless women as the main comparison group, again under the assumption that fertility decisions are unrelated to welfare. While they found that expansions of the EITC accounted for over 60 percent of the growth in employment over their sample period, they also found that welfare waivers accounted for about 15 percent, and even more if the counterfactual period is restricted to 1992-1996. This larger effect is consistent with Kaushal and Kaestner, and perhaps reflects the use of a comparison group. Indeed the effect of any termination waiver on the employment decision is about 25 percent lower when they exclude a comparison group (compare their Table IV, column(5) to Table V, column (6)).

As discussed in the last section, the introduction of time limits spurred on the estimation of structural models of labor supply to capture the joint decisions of welfare and work when mothers are forward looking. Although these studies, with the exception of Chan (2013), restricted estimation to the pre-welfare waiver era, and thus do not incorporate key elements of reform in the budget constraint, they simulated how employment was expected to change under stylized scenarios resembling welfare reform. For example, Swann (2005) conducted counterfactual simulations of cutting the effective benefit reduction via earnings disregards, introducing a five-year lifetime limit on benefits and a two-year work-requirement time limit, and the latter two combined. He found that a 10 percent reduction in the benefit reduction rate had little effect on employment choices, consistent with the AFDC literature, but the introduction of a five-year time limit lead to a 67 percent reduction in the probability of being on welfare with no work, and a 46 percent reduction of combining welfare and work. Interestingly, though, the group with the largest increase was single mothers neither working nor on welfare. This estimate is consistent with the rise of so-called disconnected women (Blank and Kovak 2009). However, when he combined the benefit time limit with the work requirement time limit his model predicted that the most common "state" for the mother is to be single, working, and not on welfare. Keane and Wolpin (2010), in their simulations, found that a five-year benefit time limit likewise had a smaller effect on the probability of working than a 25-hour per week work

requirement after six months, but they also found that most of these women remained eligible for welfare because the higher earnings did not offset the lower welfare, a result found in earlier work by Moffitt (1983) and Hoynes (1996).

Chan (2013) extended the prior two structural papers by explicitly modeling the rules affecting AFDC and TANF, including work requirements and time limits, along with food stamp rules, federal and state taxes (inclusive of the EITC), and the payroll tax. Like Meyer and Rosenbaum (2001) before him, he used repeated cross sections over time (from the SIPP, not CPS), and thus allowed the welfare and tax parameters to change across states over time, assisting in the identification of model parameters beyond cross-state variation alone. His model is quite complicated, allowing for multiple program participation, with and without work, state dependence in those program/work decisions, a distribution of job offer arrival probabilities, and a version of learning-by-doing such that lagged work status (not the stock of experience as in Keane and Wolpin (2010)) affected the wage and job-offer arrival. Interestingly, his model predicted that the employment response to job offers was ten-times larger than the elasticity of employment with respect to the wage, and likewise, program participation responses were much larger for job offers than actual wages. This suggests demand-side conditions matter greatly for the welfare and work decisions of mothers, a result that Hoynes (2000) found in her analysis of welfare spells in California. When he used the structural estimates to decompose changes in welfare and employment from 1992-1999, he found that the macroeconomy was the most important reason for the increase in employment, accounting for nearly half, and that the time limit accounted for about 6 percent of the increase, followed by the EITC, and then work requirements. His estimates yielded a larger "total" effect of welfare policy on employment compared to the modal estimate surveyed in Grogger and Karoly (2005) with the exception of

Fang and Keane (2004). The latter study's large estimate of work requirements likely stemmed from their parsimonious specification of the macroeconomy.

Welfare-to-Work

The "Riverside Miracle" framed much of the debate surrounding welfare reform, and how to transition mothers from welfare to work. In 1988 the evaluation firm MDRC was contracted to conduct a randomized control trial of the effectiveness of the California GAIN program in six counties (Riccio and Friedlander 1992; Riccio, et al. 1994). The GAIN program was the official JOBS program for the state, and depending on how the participant scored on a basic reading and math test, they were assigned either to programs emphasizing additional human-capital development (HCD) if the score was below a threshold or to programs emphasizing "work first" such as job search assistance. Counties were given great leeway to design programs that suited their needs, and as such, Riverside tended to emphasize work first, while Alameda, Los Angeles, and San Diego counties emphasized HCD. Three years after random assignment, treatment group members in Riverside experienced 63 percent more quarters of employment and a comparable gain in earnings compared to control-group members. This treatment effect was three times larger than that found in the counties focused on HCD. The miracle of Riverside served as a platform for many states (and countries) as they designed their new welfare programs. Indeed the tension of work-first versus HCD is found in Goal (ii) of TANF where the aim is to end dependence by at once promoting "job preparation" and "work."

Hotz, Imbens, and Klerman (2006) noted that the treatment effects across the GAIN sites could differ because of differences in populations served, how treatment was assigned, and in local economic conditions. They proposed a new method of how to evaluate differential effects of alternative treatments such as HCD and work first. Using these methods they then reexamined the results of GAIN by focusing on impacts nine years after random assignment, which should be a sufficiently long period for HCD to have an effect. They found that much of the "Riverside Miracle" was not due to the work-first strategies of the GAIN program in the county, rather it was an anomalous result of a very strong local economy three to five years post assignment. Moreover, by six years after assignment the longer-run gains in employment were more pronounced for those treated with an HCD approach than work-first, suggesting that HCD programs may impart long-term benefits for mothers leaving welfare.

Dyke, et al. (2006) applied some of these ideas to administrative data in Missouri and North Carolina to examine the effects of assessment, job search and readiness training, and intensive training on employment outcomes for up to 16 months after entry into TANF. Those individuals receiving intensive training gained skills more akin to HCD than the more work-first oriented assessment and job search training. They employed matching estimators, as well as difference-in-differences with matching as recommended by Smith and Todd (2005) to sweep out individual fixed effects, and found that work-first strategies fade out over time while HCD programs increase in effectiveness on labor-market outcomes.

Mueser, et al. (2009) followed up on this work, but instead relied on administrative data from the states of Missouri and Maryland. They examined the demographic composition, employment, and welfare recidivism of three cohorts of welfare leavers—leavers in FY1993, FY1997, and FY2002. Using the three separate cohorts permitted the authors to compare welfare recipients before welfare reform, during its implementation, and six years later. The data from Missouri and Maryland are not nationally representative, but the trends were strikingly similar to national trends in welfare, employment, and economic growth. Mueser, et al. found little change in the demographic composition of the caseload across cohorts, but employment rose and persisted even into the 2001 recession not only among leavers but also current recipients and new entrants, the latter of which was consistent with work requirements and perhaps states adopting a more work-first strategy. That the demographic composition at a point in time was little changed is not incongruent with the results from the Three-City Study by Frogner, et al. (2009). They found that from 1999-2005 the group of mothers who stayed on TANF became much more select—they worked less, had lower rates of marriage, and reported worse health and higher rates of disability than other mothers. Moffitt and Stevens (2001) found similar results in an earlier analysis of CPS data. This suggests that stayers face particular disadvantages well beyond the typical recipient.

Indeed, Danziger, et al. (2000) brought the issue of barriers to employment for welfare leavers to the fore after reform in their analysis of data from WES, which is a longitudinal survey of 753 women on welfare in an urban county in Michigan that was collected in five waves from 1997-2003. They reported that women unable to transition quickly in a work-first environment generally faced multiple barriers including physical and mental health problems, victimization from domestic violence, and lack of access to (any) reliable transportation. Of the 14 barriers that they assessed, 37 percent of mothers had 2-3 barriers, and 24 percent had 4-6 barriers. Their regression estimates suggested that a mother in the latter category had a 20 percentage point lower odds of working at least 20 hours per week than a mother in the former category of 2-3 barriers.

Bloom, et al. (2011) reported on a series of random assignment demonstration evaluations of programs adopted in various states over the past decade designed to address some of these barriers to employment. The programs reflected a mix of approaches to address the barriers, with some emphasizing a "learning-by-doing" philosophy where work experience is the key to overcome barriers, and others emphasizing assessment, training, and counseling in a more HCD approach. They concluded that the evidence across the 10 programs reviewed was mixed, some positive short-run impacts on employment, but not so positive or unknown impacts in the longer term. In fact the work-first models tended to exhibit poor employment results over time, and while the HCD models emphasizing treatment suggested that service use increased, the corresponding employment effects are not known. One potentially promising model was implemented in rural Nebraska ("Building Nebraska Families") that involved home visits every week or two by a highly trained professional with a Masters degree. The overall employment effect was zero, but it was positive for the hardest-to-serve facing multiple barriers, suggesting the need for future evaluation of more intensive and targeted strategies on the most disadvantaged.

4.2.3 Earnings and Income

Does work "pay" for former welfare recipients? This was an oft-raised question in the aftermath of welfare reform. The record of earnings gains of welfare leavers under the former AFDC program was not encouraging. However, the 1996 reform was being implemented in one of the strongest periods of economic growth in the post-WWII era, and there were complementary reforms that occurred simultaneously; notably, the expansion of the EITC in 1993-1996 and the introduction of the State Children's Health Insurance Program (SCHIP) in 1997 that provided insurance to children in families whose income is low but too high to qualify for Medicaid. It was hoped that the strong economy and other policy reforms, combined with the pull of liberalized earnings disregards and asset limits as well as the push of work requirements and time limits, would lead to earnings and income gains of single mothers, both those on the program and at risk of joining.

The initial results of the welfare-reform bundle on earnings and income were not especially promising. In a descriptive study, Primus, et al. (1999) examined changes in the earnings and disposable income (inclusive of EITC, food stamps and housing assistance, less federal and state tax payments) of female-headed households from 1993 to 1995 and again from 1995 to 1997 from the March CPS. They found that among families in the bottom 20 percent of the single-mother family disposable-income distribution, earnings increased by one-third and disposable income by 14 percent during welfare waiver/pre-TANF era, but then disposable income fell an average of \$580, or 7 percent, after passage of PRWORA. Of the decline, 20 percent was lower earnings and 80 percent was lower means-tested transfers. Among those mothers in the second quintile of the income distribution, their earnings continued to rise from 1995-1997, but total disposable income was unchanged due to the clawback of transfers.

The Primus, et al. study did not control for any confounding factors, but both Moffitt (1999) and Schoeni and Blank (2000) did control for other factors such as the state business cycle, demographics, and welfare reform. Moffitt (1999) found that in the pre-PRWORA period (1977–1995) the state-specific welfare waivers led to an average increase in annual earnings of \$274, or about 2-3 percent above the mean, but all of this gain was among mothers with a high school diploma or more. He found no effect on family income. Schoeni and Blank (2000), who used CPS data through 1998, found a significant welfare-reform induced increase in own and family earnings for women with less than high school in the waiver period; however, there was no additional increase after the passage of PRWORA. They did find evidence that welfare reform both in the waiver period and the TANF period reduced the incidence of poverty for the subpopulation of less-skilled women. It is not clear whether the difference between the Moffitt and Schoeni and Blank studies comes from the extra three years in the latter study, or the fact

that they exclude those with zero earnings and incomes and use logarithms instead of levels. While Grogger (2003) finds no specific effect of time limits, or age-adjusted limits, on earnings and income, he did find a modest overall reform effect on both, especially if he drops 0s and uses logs of the dependent variable.

Several early studies highlighted the importance of heterogeneity of welfare reform effects, whether by place in the income distribution or education attainment. These ideas were formalized in a few recent papers, most prominently in Bitler, et al. (2006a). They used data from MDRC's random assignment evaluation of Connecticut's Jobs First program, which was implemented between January 1996 and February 1997 and in the field until the end of 2000. Jobs First features a 21-month benefit time limit—the shortest in the nation (see Table 4)—along with one of the most generous earnings disregards policies (see Table 6). In the static model of labor supply Jobs First generates heterogeneous predictions across the distribution, ranging from no effect at the bottom, to positive effects in the middle, to possibly negative effects at the top of the distribution resulting from behavioral-induced reductions in labor supply. They test these predictions using an inverse probability weighted quantile treatment effects estimator, where the weights are based on propensity score model of the probability of assignment to Jobs First.¹⁶ Bitler, et al. (2006a) find results on earnings consistent with theory, and when they apply the estimator to total income, they find significantly negative effects at the 20th-40th quantiles, and positive effects between the median and 75th quantile.¹⁷ Bollinger, et al. (2009) generalized the Bitler, et al. estimates in their study of single-mother families in the March CPS from 1979-2004.

 ¹⁶ Even though assignment to Jobs First was random, Bitler, et al. (2006) used weights because of some evidence of pre-treatment differences in earnings and welfare income across treatment and control groups.
 ¹⁷ Lamarche and Hartley (2014) test the robustness of Bitler, et al. by admitting person-specific latent heterogeneity

¹⁷ Lamarche and Hartley (2014) test the robustness of Bitler, et al. by admitting person-specific latent heterogeneity and re-estimating with a panel-quantile estimator. They confirm the results, except at the top of the distribution of earnings where they do not find evidence of fade out, perhaps suggesting that latent preferences for work (or stigma of welfare) induces these women to not pull back effort in the presence of Job First.

They estimated the effects of welfare reform, the business cycle, and interactions of the two, as well as with education attainment of the mother, for various quantiles of both the earnings and disposable income distributions. They found that TANF raised disposable incomes an average of eight percent among higher skilled mothers, and raised earnings among low skilled mothers in the lower half of the distribution by as much as 20 percent, but also resulted in a significant equal-sized loss of after-tax total income among the low-skilled. The earnings gains among the low skilled a decade after the implementation of TANF have been more than offset by losses in transfer income.

Leaver Studies

Adding to the mixed signals of the effects of reform on earnings and income are the findings from leaver studies. Cancian, et al. (2002) used two cohorts of leavers in the state of Wisconsin, one from AFDC in 1995 and a second from TANF in 1997, and examined the mother's own earnings and incomes as well as family-level outcomes. Although they found that earnings were substantially higher in the quarter one year after exit compared to the quarter prior to leaving, these earnings gains were wiped out by losses in other income so that total income (both own and family) was lower and poverty rates higher.

This is contrasted with the results in Danziger, et al. (2002), who used data from WES and thus followed a single cohort of leavers in a Michigan county from 1997-1999. They found a substantial 63 percent increase in net income for "wage reliant" mothers who were working and not on welfare compared to "welfare reliant" mothers who stayed on welfare and were not working, though even among the former nearly half remained in poverty. Moffitt and Widner (2005) used the first two waves of the Three City Study (1999 and 2001) to look at the same issues, but found a much smaller gain (14 percent) among working leavers. They argued that this

was due to lower receipts of "other family income" among their sample participants compared to those in WES. This was also true among disconnected leavers (not in work or on welfare), but again this group is better off in the WES. Moreover, mothers who combined welfare and work were no worse off than those strictly wage reliant, again contrary to Danziger, et al. In response, Danziger and Wang (2005) wrote a rejoinder and found that their earlier results from WES were largely robust, though smaller in magnitude, if the contributions of other members were excluded. While likely not the last word on the issue, Frogner, et al. (2009) added the 2005 wave of the Three City analyses of Moffitt and Widner and concluded that (p. 169):

"On the critical issue of whether "work pays," which we define as having occurred when the increase in a leaver's own earnings after leaving welfare exceed the loss of benefits, we find that it does so for employed leavers. However, it does not do so overall; when leavers as a whole are considered, employed and nonemployed combined, increases in average own-earnings are completely offset by declines in TANF and Food Stamp benefits. Incomes for leavers rise, on average, but this is because of increases in other household members' earnings and increases in disability payments. But, on average, going off welfare does not result in sufficient work to compensate for the loss of benefits."

Where there is evidence that work pays for low skilled women, it comes from demonstrations that involved intensive training of both clients and case managers, assistance finding full-time work, and generous wage supplements such as in MFIP, New Hope, and SSP (Knox, et al. 2000; Michalopoulos, et al. 2002; Duncan, et al. 2008, 2009).

Anti-Poverty Effects

Taken together, the results from leaver studies, demonstrations, and from national samples suggest that many women were worse off financially after welfare reform, especially at the bottom of the distribution. But this result becomes clear only if data post-2000 are brought to bear. Recall that Schoeni and Blank (2000) found that both waivers and TANF resulted in lower family poverty in CPS data through 1998. The latter result was corroborated in Gundersen and

Ziliak (2004), who used CPS data from 1980-1999 and found that the depth and severity of aftertax and (in-kind) transfer poverty among female-headed families was lower after welfare reform. Mills, et al. (2001) used semi-parametric density estimators to compare the 1993 income distribution of single mothers in the CPS to the 1999 income distribution, finding that single moms were better off across the distribution in 1999 (though this is mostly due to the economy).

When post-2000 data are incorporated, the longer-term effects of welfare reform are less encouraging, especially at the low-end of the distribution. This is seen descriptively in the fact that (i) TANF fills a smaller share of the so-called poverty gap—the distance between a family's income and their family-size adjusted poverty line—as demonstrated in Ziliak (2008) and Moffitt and Scholz (2010); (ii) there was an increase of over one-third between 2000 and 2005 in the fraction of single mothers disconnected from work and welfare (Blank and Kovak 2009); (iii) there was a 50 percentage point reduction from 1996 to 2011 in the number of households with children lifted out of extreme poverty of \$2 per day by TANF (Shaefer and Edin 2013); and (iv) the evidence of a tempered response by TANF to changing business-cycle conditions (Bitler and Hoynes 2010; forthcoming). This dire set of facts is cause for concern, and also is cause for renewed research to identify the extent to which these relationships are causal. Such work must also confront the challenge of measurement; namely, that reporting rates of TANF have declined over time, especially in the CPS, and the fact that since 70 percent of TANF is non-assistance, we do not as yet have an understanding of whether survey respondents include an estimate of the cash-equivalent of some of this in-kind support.

4.2.4 Consumption, Saving, and Material Well Being

Compared to the voluminous literature on the effects of welfare reform on participation, work, and earnings, research on the consumption, saving, and material well being of welfare

families is limited. As discussed in the theory section, the presence of a consumption floor and asset tests reduces the incentive to save and thus can lead to "over consumption." Hubbard, et al. (1995) suggested that this was important within their calibrated dynamic programming model, but as yet these ideas have not been taken directly to the data in the context of estimating an intertemporal consumption function. There was one notable paper that showed that the AFDC program functioned well as a buffer against consumption losses (Gruber 2000), and a couple of others on the transfer system overall as a partial consumption insurance mechanism (Kniesner and Ziliak 2002; Blundell, et al. 2008), but nothing using data from the post welfare reform era. There have, however, been a few papers on saving, as well as on consumption levels and material hardships more generally, which are discussed below.

Saving

Powers (1998) offered the first formal test of how saving responds to asset limits, though in her case she focused on the period when limits were federalized as part of OBRA 1981. Prior to this legislation there was considerable variation across states in asset limits, but by 1983 only a few states deviated from the federal liquid asset limit of \$1,000. Powers tested how changes in the net wealth of female heads in the National Longitudinal Survey of Young Women changed between 1978 and 1983, concluding that saving decreased by \$0.25 for each \$1 decrease in the asset limit in 1981.

After the 1996 welfare reform, lower real guarantees, higher asset limits, and higher earning disregards all suggest that saving and the asset position of the typical mother on welfare should be higher in TANF than under AFDC. Hurst and Ziliak (2006) used data from the wealth supplements to the 1994 and 2001 waves of the PSID to test how liquid assets, as well as certain subcomponents such as ownership of checking and saving accounts and vehicles, changed in response to higher liquid asset limits, vehicle limits, and time limits. They found that the saving of female-headed households with children was unresponsive to the welfare-reform induced changes as part of PRWORA. The upper bound saving response from the 95 percent confidence interval to a \$1000 increase in the liquid asset limit was \$40, and the average response was between -\$80 and \$10. Because nearly 85 percent of single mother families held liquid wealth below one half of the pre- welfare-reform limit, it suggests that they are rarely binding for most of these families. However, Ziliak (2003), using PSID wealth data for 1984 and 1989, showed means-tested transfers reduce liquid-asset accumulation and precautionary saving motives of those at risk for welfare. This indicates that the consumption floor aspect of welfare is more important than the asset limits per se. There is one exception—welfare reform had a small positive impact on vehicle ownership. This result was corroborated in Sullivan (2006) and McKernan et al. (2008), though in the latter only from liberalized food stamp vehicle limits. Because car ownership has been shown to be an important causal channel behind the labor market success of low-income workers (Raphael and Rice 2002), the liberalization of vehicle limits may potentially have a long-run benefit, but this has yet to be established.

Consumption and Material Hardship

Meyer and Sullivan (2004) used data from the Consumer Expenditure Survey (CE) and the PSID from 1984-2000 to estimate the effects of welfare reform at the mean and selected quantiles of the income and consumption distributions. They specified a difference-indifferences model where the treatment group was single women with children and the comparison group was either single childless women or married mothers, and the periods of study were 1984-90, 1991-93, 1994-95, 1996-2000. They found that the level of inflationadjusted total consumption increased for single mothers, and with a relative increase near the bottom of the consumption distribution for less-skilled single mothers. Some of these gains in consumption occurred after 1995, but these changes were smaller and in many cases not statistically significant. Overall, they concluded that the material well being of single moms did not decline in the five years after PRWORA. However, as highlighted below in Bitler, et al. (2006b), the living arrangements of welfare families is quite complex, and focusing solely on single mother families may miss important changes in overall household material well being.

In a follow-up paper, Meyer and Sullivan (2008) used CE data from 1993 to 2003, along with data from the American Housing Survey, the National Time Use Survey, and the American Time Use Survey, to document trends in total spending and separate components. They found that total consumption increased across the distribution by 7 to 12 percent, with most of the increase at the low end of the distribution coming from increased outlays on housing and transportation, with some modest improvements in the quality among the former category.

Kaushal, et al. (2007) also used CE data on consumption among single-mother households to compare pre-reform (1990-1995) years to post-reform (1998-2003). They separated the families by education attainment, which is generally deemed to be a fixed characteristic of adults that serves as a good proxy for permanent income, instead of estimating quantiles of the consumption distribution pre- and post-reform as in Meyer and Sullivan (2004) because there may be an endogenous change in sample consumption composition in response to reform. They then compared the difference-in-differences in consumption of low-skilled to highskilled single mothers to that of married mothers who are assumed to be unaffected by reform. The triple-difference estimates suggested that there was no response of total spending after welfare reform among single mothers at-risk of welfare, though they did find significant increases in spending on transportation, food away from home, adult clothing, and footwear. The increased spending on "work supports" is consistent with the 2008 paper by Meyer and Sullivan, as well as the vehicle saving response in Hurst and Ziliak (2006) and Sullivan (2006).

Beyond actual outlays on goods and services, there is interest in measuring material hardships associated with welfare reform. These hardships are intended to capture not only the quality dimension of material well being, but also the volatility, such as having utilities shut off, pawning items or engaging in illegal activities to acquire necessary goods and services, and perceptions of economic anxiety. Kalil, et al. (2002) used the first two waves of the WES and found that sanctions were significant correlates of these types of material hardships, along with the mother's mental health. Heflin (2006) extended this work to five waves of the WES and to six forms of hardships: food insufficiency, telephone disconnection, utility disconnection, unmet medical needs, improper winter clothing, and housing problems. She reported high levels of hardships, ranging from 20 percent for improper winter clothing to 56 percent for an unmet medical need, and that experiencing the hardship was common (only 10 percent never experience one of the six over a 5-year period) and recipients typically faced multiple hardships at the same time (2.6 on average). Cancian and Meyer (2004) in their leaver study of TANF participants in Wisconsin reported that 44 percent of long-term recipients (defined as receiving welfare for at least 18 months) faced one or more hardships, though this was not qualitatively different from those shorter-term recipients, 41 percent of whom faced at least one hardship. It is a concern that much of our evidence on hardships comes from a couple of area studies, though in an examination of the link between income and material hardship, Sullivan, et al. (2008) reported that the results from WES are comparable to those found in a national sample from the SIPP. To date, however, there is no direct causal evidence on the role that welfare reform had on material hardships.

4.2.5 Health

The concept of "job lock" is most associated with workers unwillingness to change jobs for fear of loss of health insurance. The corollary facing low-income single mothers was "welfare lock"—the fear of loss of health insurance via Medicaid upon exiting welfare. Categorical eligibility for Medicaid was bestowed upon recipients of AFDC, and this group comprised the largest share of the Medicaid caseload (though spending was higher for poor elderly residing in nursing homes). TANF, however, severed the direct link to Medicaid (though families that met AFDC eligibility standards as they existed in 1996 remained eligible). Welfare leavers under TANF whose earnings place them above Medicaid eligibility thresholds retain access to transitional insurance for 12 months after exit. After transitional assistance, the mother is either covered by private insurance (her own policy or employer's) or not at all, and her children are either covered on her plan or by Medicaid or SCHIP, the latter distinction depending on the state of residence, age of children, and income level. If the mother qualifies for Supplemental Security Income upon exit from TANF then at state discretion she qualifies for Medicaid, and if she is awarded Social Security Disability Insurance then coverage comes from Medicare after a two-year wait. In short, the anxiety over health coverage can create incentives for long spells on welfare, but these potential spells then confront time limits and work requirements.

Health Insurance

Several authors have examined the effect of welfare reform on health insurance coverage. This research is comprehensively surveyed in Bitler and Hoynes (2008), and briefly summarized here. Kaestner and Kaushal (2003) were the first to systematically assess this issue, where they estimated a difference-in-difference model of health insurance coverage of the family as a function of welfare waiver and TANF implementation, state caseloads, and person-level and state-level socioeconomic controls. The primary treatment group was low-skilled single mothers (12 or fewer years of schooling) and the comparison group was either low-skilled single childless women or low-skilled married women. Using data from the March CPS for 1992-1999 they found that Medicaid coverage of single mothers fell 7-9 percent after welfare reform, and private insurance rose 6 percent, which on net left fewer mothers insured. They attributed just a small portion of these changes to welfare reform and more to other factors that caused caseloads to decline.

This basic result of lower insurance coverage is corroborated in Bitler, et al. (2005), who used data from the Behavioral Risk Factor Surveillance System (BRFSS) from 1990-2000, and in Cawley, et al. (2006), who used data from 1992-1999 in the SIPP. Bitler, et al. applied doubleand triple-difference estimators to identify the effect of welfare reform on health insurance coverage, where the former models on single women relied solely on state variation over time in policy changes and the latter also utilized married women as an additional comparison group. They found most of the reduced coverage was from Hispanic mothers. Cawley, et al. also compared low-skilled (never-married) mothers to low-skilled married mothers, but because they also followed the same family over time they controlled for individual fixed heterogeneity. They found a larger overall effect of TANF, leading to an 8 percent increase in mothers being uninsured post welfare reform, though they did not provide estimates separately by race and ethnicity. Borjas (2005), using the 1995-2001 March CPS and a triple-difference estimator, found a sizable reduction in Medicaid coverage among immigrants relative to natives, but that coverage overall was stable or even increased because of a large increase in labor supply (and presumably employer-sponsored insurance) among those immigrants most likely affected by the

reforms. Holl, et al. (2005), however, found that Hispanics had significantly higher odds than blacks of being uninsured or having a gap in coverage two years after leaving welfare in a random panel of welfare leavers in Illinois, suggesting greater volatility of coverage in this population.

Ham, et al. (2009) used data spanning 1989-2003 in various panels of the SIPP to reexamine the effect of welfare reform on health insurance coverage among single mother families. They conducted a battery of tests and actually rejected the use of all previously adopted comparison groups—single childless women, and married women either with or without children. This has important implications for many non-experimental papers adopting the differences-in-differences estimation strategy as most use the comparison group approach without actually verifying whether or not the treatment and comparison groups have similar "pre-treatment" trends in the outcomes of interest. Ham, et al. thus estimated their models separately for each group, but also admitted heterogeneity in the effect of reform on insurance coverage by education level of the mother, and whether the mother was an immigrant or native to the United States. The authors found evidence that welfare reform reduced Medicaid coverage among less skilled single mothers, though this loss was somewhat offset by a rise in private coverage. These effects were heavily concentrated among the Hispanic immigrant population, perhaps reflecting the so-called chilling hypothesis. These estimates overall, and for Hispanics, differ from DeLeire, et al. (2006), who also estimated models separately by demographic group, and for a similar time period, but used March CPS in lieu of the SIPP. Ham, et al. (2009) attempted to replicate the DeLeire, et al. results in the SIPP, but were unsuccessful. They conjecture that the difference may lie in the timing of questions between surveys—they used

monthly data in SIPP while DeLeire, et al. used annual data in CPS—and the reference period may be important. Clearly, reconciling these differences in estimates merits research attention.

Mother's Health

To date there has been much less research on mother's health after welfare reform (child well being is discussed below). Bitler, et al. (2005) found evidence in the BRFSS of a substantively and statistically significant reduction in health-care utilization of single black and Hispanic women compared to married women, as measured by wellness check-ups, pap smears, and breast exams. Kaestner and Tarlov (2006) also used data from the BRFSS, but the same identification strategy as employed by Kaestner and Kaushal (2003) in their study of health insurance coverage. Specifically, they identified the effect of welfare reform on health outcomes via its effect on the welfare caseload. They focused on four health behaviors (smoking, binge drinking, diet, and exercise) and four self-reported measures of health (body mass and obesity, days in poor mental health, days in poor physical health, and general health status). Overall, they found little effect of reform on these health outcomes, with the exception of a reduction in binge drinking. Corman, et al. (2013) used a variety of data sets to estimate the effects of welfare reform on illicit drug use among low-skilled single mothers. They found that welfare reform led to a 10–21 percent decline in illicit drug use, and a 7-11 percent decline in hospital emergency department episodes. Whether these declines are the result of increased employment, increased work-related drug testing, TANF (or SNAP) policies, or some other mechanism is unknown.

Bitler and Hoynes (2008) used data from five random-assignment demonstrations projects—MFIP, FTP, Jobs First, Iowa's Family Investment Program, and Vermont's Welfare Restructuring Project—that were conducted during the waiver era. Some of these demonstrations had policies like time limits and work requirements, but none are fully translatable to the current TANF structure. Most of the evaluations of health outcomes were conducted three to five years after random assignment, offering a medium-term glimpse of the policy effects. In three of the five experiments they identified increases in the ability to afford a dentist ranging from 2-16 percent, and in four of the five experiments they saw increases in the ability to afford a doctor ranging from 6-16 percent. None of these effects, however, were statistically different from the control group. They also reported that in four of the five demonstrations there was a reduction in the risk of the mother facing depression, with a statistically significant 20 percent effect relative to the baseline in the MFIP program with work incentives only (and not work requirements).

Overall, our knowledge of health effects of welfare reform on the caregiver is limited, both in experimental and nonexperimental settings. The latter arises in part because of the lack of public survey data on health outcomes that provide geographic identifiers necessary to map welfare policies to outcomes, and in part due to relatively small samples in the major health surveys such as NHANES.

4.2.6 Family Structure

All four goals of TANF touch upon family structure, ranging from providing assistance so "children may be cared in their own home," marriage preparation and maintenance, and out-ofwedlock childbearing. This emphasis by policy makers was not because of strong social science evidence that the AFDC program had significant impacts on family matters. Indeed, in his 1992 review Moffitt concludes "the welfare system does not appear capable of explaining most of the long-term trend, or any of the recent trend of increasing numbers of female-headed families in the United States." (p. 57) Instead, the focus on the family irrespective of the evidence was an example of what Burtless (1990) called "The Economist's Lament," where he noted "Hard evidence about the behavioral consequences of the program evokes at best a shrug outside the behavioral sciences." (p. 76) Regardless, or perhaps in spite of this lack of policy responsiveness to evidence, the research community embraced the cross-state over time changes in the waivers and TANF to reexamine how welfare reform affected marriage, divorce, cohabitation, and fertility.

Living Arrangements

Bitler, et al. (2004) used flow data at the state level to estimate the effect of waivers and TANF on new marriages and new divorces from vital statistics spanning 1989 to 2000. They measured waivers as the share of the year that a state had a major waiver in place and/or that TANF was implemented. Their models controlled for state economic conditions, demographics, and the generosity of the AFDC/TANF benefit, along with fixed state and time effects, and in some cases state linear trends. They found that during the waiver era flows into marriage were about 5 percent lower, and up to 20 percent lower during TANF. At the same time, they found equal size reductions in divorce rates from waivers, and half again the size of marriage rate reductions during TANF. Their results provide mixed evidence in meeting TANF goals—marriages were less likely to dissolve, but also less likely to form. This is somewhat consistent with Schoeni and Blank (2000), who in their analysis of CPS data found that the stock of married mothers increased during the waiver period, but only among less-skilled mothers.

However, Fitzgerald and Ribar (2004), who used longitudinal data from multiple waves of the SIPP spanning 1989-2000 to estimate the effects of waivers and TANF on rates of and transitions into and out of female headship, found limited robust effects of welfare reform on any of the female headship outcomes. Graefe and Lichter (2008) likewise examined transitions into marriage, though their focus was on mothers whose first birth was nonmarital, a group of key policy interest. They are unique in their use of 1995 and 2002 waves of the National Survey of Family Growth, which measures marital and fertility histories of a cohort of women pre-welfare reform and post. Their difference-in-difference estimates suggest that marriage rates of women whose first birth was out-of-wedlock compared to women with no child prior to marriage were no higher after welfare reform than before, and those women in the later cohort were more likely to marry men with weaker labor-market potential. Knab, et al. (2009) also tested whether the policy reforms affected the likelihood of marriage following a nonmarital birth, though in their case it was marriage to the biological father five-years after the birth and was restricted to the post-PRWORA period only via the Fragile Families longitudinal dataset. While they found some evidence that higher welfare generosity and strong child support enforcement was associated with lower rates of marriage, these results were quite sensitive to inclusion of state fixed effects because there was little time variation across the fifteen states in the sample.¹⁸

In a follow-up paper, Bitler, et al. (2006b) used repeated cross-sections from the March CPS to examine the effect of reform on the living arrangements of children; that is, whether the child lived with an unmarried parent, with a married parent, or neither. Although they employed similar methods as in their 2004 paper, this project differed not only in the data source but importantly in that it took the perspective of the child as opposed to the adult caretaker. They do so because the CPS does not document the whereabouts of a mother's child if the child does not reside with the parent. They found that waivers were associated with reductions in the odds that a child lived with an unmarried parent, increases in the chances they resided with a married parent, and increases in the probability of living with neither parent (and instead with a grandparent or nonrelative caretaker). The latter effect was concentrated among black children, while the increased odds of living with a married parent was found largely among Hispanic children.

¹⁸ Teitler, et al. (2009) also used Fragile Families to examine transitions into marriage after a nonmarital birth, and find that they are lower if currently on welfare, but past welfare usage has no effect on the odds of marriage.

White children had lower odds of living with a married parent before PRWORA, and higher after, painting a mixed picture for this demographic group.

Cherlin and Fomby (2004) used the first two waves of the Three City Study, which predominantly consists of black and Hispanic families, to examine this same issue and showed that the increase in child residence in two-adult households was via an increase of blended families (biological mother with non-biological father) and not biological families, and that these blended unions are more unstable and may perhaps lead to long-term challenges for children. Dunifon, et al. (2009) also examined the living arrangements of children using longitudinal data from the SIPP for 1992-1999 along with disaggregated welfare policy measures such as time limits, sanctions, and earnings disregards. Overall, their estimates suggested few consistent effects of welfare policies on the chances of a child living with married, cohabiting, or single parents. Some policies affected certain children only in the waiver period, other policies affected other children only in the TANF period. Perhaps this heterogeneity of treatment is correct, but until such results are verified in more samples and over longer time periods, they mainly serve to keep the waters muddied on the effects of welfare reform on marriage.

Fertility

There were several papers that examined the effects of welfare reform on fertility, which have yielded mixed evidence, not unlike in the AFDC research of the 1970s and 1980s. Joyce, et al. (2003) used data from Detailed Natality Files for 1990 to 1999 and a difference-in-difference estimator to compare birth rates among a high-welfare risk group of unmarried women with 12 or fewer years of schooling to a comparison group of married women with 12 or fewer years of school or unmarried women with 13-15 years of school. Their results suggest little effect of welfare reform on fertility, and if anything, there was a slight increase among white and black

women. Garfinkel, et al. (2003) also used natality files, but spanning 1980-1996. Their focus was comparing cross-state over time changes in the maximum benefit guarantee to state child-support enforcement efforts. They found that stricter child support enforcement led to a 6-9 percent reduction in fertility, and welfare benefit declines to a 2-4 percent reduction.

Joyce, et al. (2004), Kearney (2004), and Horvath-Rose, et al. (2008) focused on the specific role that family caps played on nonmarital childbearing. Joyce, et al. employed a tripledifference estimator to estimate the effect of family caps on birth rates and abortion rates. The triple difference comes from comparing family cap to non-family cap states before and after implementation, and within these states, births and abortions among those at risk of the cap (at least in the short run) by virtue of their having a prior birth compared to those low-skilled women with no prior birth. They found that birth rates fell and abortion rates rose among women at risk of the cap, but since this was found also in states with no cap, it was not possible to attribute the change to this specific policy (though they cannot rule out a wider welfare reform effect, or no effect at all). Kearney's (2004) estimates using data from Detailed Natality Files reinforced this finding of no family cap effect on fertility, and like the earlier paper by Joyce, et al. (2003), she found a perverse positive effect of family caps on higher-order births among unmarried blacks and high-school dropout white women. Horvath-Rose, et al. (2008), however, found that nonmarital childbearing is significantly lower after the implementation of family caps, but perversely, marital births were significantly higher. Given the lack of evidence discussed above on the muted effects of welfare reform on marriage, this calls into question the efficacy of the model identification, perhaps as they argue, due to the endogeneity of the family cap policy.

Most of the papers examining family caps estimated the models separately for teenagers and adults. However, there have been a few papers to isolate fertility among teens. Kaestner, et

al. (2003) compared cohorts of 17 year olds and 19 year olds in the National Longitudinal Surveys of 1979 and 1997, where the difference-in-difference results were mixed. They found some evidence of increased nonmarital births among 17 year olds, but no effect among 19 year olds. Hao and Cherlin (2004) also used the NLSY, but only the 1997 survey where they used the fertility history rosters to separate 14-16 year olds pre-welfare reform and 14-16 year olds post reform. The difference-in-difference estimates suggested no effects of welfare reform on teen pregnancy or births. The exceptions are Offner (2005) and Lopoo and DeLeire (2006). Offner used March CPS data on 16- and 17-year old girls from 1989-2001 and a difference-in-difference estimator where the treatment group was teenage girls in families below twice the poverty line or below the 30th percentile of the income distribution, and the comparison group was girls from higher-income families. He found a decline in teenage out-of-wedlock child-bearing of 1.4 percentage points, or 17 percent of the baseline rate. Lopoo and DeLeire used birth data from Detailed Natality Files, to compare birth rates for 15-17 year olds to 18 year olds before and after welfare reform. The specific policy they isolate is "minor parent rules," whereby teen parents are required to stay in school as a condition of benefit receipt and to reside in a home maintained by an adult caretaker. During the waiver era 15 states implemented such rules, and thus they exploited the differential timing across states in order to identify the effect. They found a 22 percent decline in annual fertility rates among 15-17 year olds following implementation of these minor parent provisions.

It is notable that all the evidence to date on the effect of welfare reform on family structure comes from data within 5 years of implementation of TANF, and thus future research utilizing changes over the past decade is needed.

4.2.7 Child Well Being

The origins of TANF via the AFDC program, and ADC and Mothers' Pensions before that, lie in improving the well being of children. Perhaps it is surprising then to close out the review of TANF with research on child-focused outcomes, rather than leading with the topic. Part of this stems from the fact that in the years surrounding welfare reform, most of the policy and research lenses were focused on caseload reductions and employment gains at the expense of broader issues of child and family well being. Part of it also stems from the fact that the main national surveys that have been employed to conduct observational studies of welfare reform lack child-focused questions (e.g. CPS) or only ask them intermittently (e.g. SIPP). This led many researchers to study the topic using data from demonstration projects, specialized surveys, or to field new longitudinal surveys such as Fragile Families, the Three City Study, and WES.

Morris, et al. (2009) synthesized results on child outcomes from seven random assignment experiments covering over 30,000 children in the 1990s as part of MDRC's Next Generation Project. They also used the experimental nature of the data to test how welfare policies designed to discourage welfare and encourage work affected children's achievement and school performance. They found that programs with earnings supplements that boost both maternal employment and income improved pre-school children's achievement; however, if the program only raised employment and not income then no discernible effects for pre-K children were found. Moreover, programs that supported center-based child care also resulted in improved achievement for pre-K children relative to children in home-based or other care. Adolescents age 11 and older, on the other hand, experienced worse academic outcomes relative to children in control groups, while no conclusive pattern of effects were found among children ages 6-10. The worse outcomes for older adolescents seem to be linked with maternal employment and the attendant increase in home responsibilities for the older child.

This positive result for young children was recently corroborated in national data by Dahl and Lochner (2012), who showed that the EITC program boosts child achievement among young children, and in the negative corollary result in Heflin and Acevedo (2011), who found lower cognitive achievement among young children on TANF in Fragile Families. Heflin and Acevedo argued that the pathway for this result was from worse mental health of the mother on welfare, which seems to coincide with Herbst's (2013) finding that mothers subjective well being was higher after welfare reform via increased attachment to work. These positive results for young children are to be contrasted to the non-results reported in Jacob, et al. (2015) for a housingvoucher experiment in Chicago, in Chase-Lansdale, et al. (2003) from the Three City Study discussed above, and from the negative results reported in Herbst (2014), who used state-time variation in age of child work exemption policy as an instrumental variable for the effect of maternal employment on child achievement in the first year. His estimates from the Early Childhood Longitudinal Study Birth Cohort found that children of mothers who went to work in the first year of life experienced worse cognitive achievement at 9 months of age. Moreover, the negative results on adolescents in Morris, et al. contrast to the positive mental-health gains for this age group in Chase-Lansdale, et al. when the mother transitioned to work after welfare. The difference in the young children results across studies may lie in the fact that mothers transitioning into work in the Three City Study, while likely eligible for an earnings supplement like the EITC, may not have taken up the benefit and thus these outcomes look more like those from mothers with employment but no supplement in the Morris, et al. (2009) study. The latter do not report on mental health outcomes of adolescents, so these results are not easily reconciled, and also conflict with the positive results from observational studies on schooling outcomes among teenagers discussed below.

In related leavers studies, Kalil and Dunifon (2007) reported results from five waves of the WES that mother's employment had no deleterious effects on children's behavior. Osborne and Knab (2007) used a cross-section of Fragile Families at the 3-year follow up survey after the child's birth, and they reported that child outcomes were better after the mother transitioned to work, but this stemmed from positive self selection of the types of mothers who chose paid work, and not a result of paid work per se. Slack, et al. (2007) reported from the Illinois Families Study that children of mothers who were unemployed and off welfare were in better health than similar children whose mothers were working and off welfare, and the latter were comparable to those on welfare regardless of work status. This result is surprising as this is the group generally defined as "disconnected mothers," and it holds even controlling for confounding factors, including higher rates of marriage among the no work/no welfare group. Since their study is based on a small sample in a single state, it is premature to draw any generalizations.

There are several negative child health outcomes from studies using national surveys and standard difference-in-differences estimators. For example, Haider, et al. (2003) found rates of breast feeding to be 5.5 percent lower overall after welfare reform, and as much as 22 percent lower among mothers receiving WIC and residing in states with stringent work requirements on new mothers with children 6 months of age. Kaestner and Lee (2005) reported reductions in first trimester prenatal care, the number of prenatal care visits, and an increase in the fraction of low birth weight babies. Paxson and Waldfogel (2003) reported that in states with stricter lifetime welfare limits and sanctions for noncompliance there was an increase in substantiated child maltreatment. Kalil and Ziol-Guest (2009) found that the gap between low-income children of non-citizens versus natives in terms of children's health and family access to care widened up to 30 percent over the baseline, suggesting that immigrant families face barriers, whether real or

perceived, to health care after PRWORA. The exception here is Dunifon, et al. (2006), who used two waves from the SIPP to examine pre- and post-welfare reform effects and found no consistent effects on child outcomes. This study, however, only employed a difference estimator and thus did not net out potentially confounding trends that could be controlled with a comparison group.

There is a potential bright spot for adolescents (beyond the couple of studies that found lower teen births) in recent work on education attainment. Offner (2005), in the same paper on teen fertility, examined drop-out rates among teens. He reported that drop-out among 16- and 17- year old teens declined 3.2 percentage points after welfare reform, or 24 percent of the pre-reform baseline. Dave, et al. (2012) used the schooling supplement of the CPS fielded in October of each year, but restricted attention to the years 1992-2001. They employed a triple-difference estimator that compared pre- and post-welfare reform periods (waivers and TANF separately) for a group at high risk of welfare (unmarried females ages 15-20 living with one or no parent who had less than a college education) versus a group at low risk (males of similar SES background). They found that welfare reform reduced the odds of a teen girl dropping out of high school by 15 percent. Miller and Zhang (2012), who used a difference-in-difference estimator applied to both October CPS and to administrative data from the Common Core of Data from 1991 to 2005, found a reduction in high school drop-out rates of males and females combined of 20 percent after welfare reform.

5. Summary

Welfare reform spawned a flurry of new research—observational studies, demonstration projects, and surveys—that stemmed both from the broad reach of the new TANF program across multiple domains of family life, and from extensive variation in program features across

states and over time that facilitated nonexperimental program evaluation. Nearly two decades after passage of the landmark legislation, are we in a position to draw firm conclusions on the effects of welfare reform? With few exceptions, it is still premature to make definitive claims on TANF.

Work and welfare use were the focal research interests in the early days of welfare reform, and to date remain the most widely studied outcomes. The weight of research evidence seems to indicate that welfare reform reduced participation in the TANF program, increased employment and earnings, and decreased total after-tax and transfer incomes, at least in the lower half of the income distribution of single mothers. To be certain there is wide disagreement in the literature on the magnitude of effects vis-à-vis the business cycle and other policy changes such as the expanded EITC, but there is agreement on the direction. This is perhaps as close to consensus as we get at this stage. Within the bundle of welfare reform policies, time limits and work requirements are the two leading reforms that contributed to the decline in welfare use and rise in employment rates, but what role they had on broader measures of earnings and disposable incomes is as of yet unsettled.

Beyond work and welfare, our confidence begins to wane, either because of scarcity of evidence or wide discrepancy of estimates. There is some limited evidence that welfare reform had no effect on saving (except for increased vehicle wealth) or total consumption, and it reduced health insurance coverage and lowered health outcomes (especially among Hispanics). There are also a few studies that show that flows into marriage, teen births, and teen drop-out rates are all lower after welfare reform, but again we are limited on the number of studies using national data and rigorous identification methods to draw firm conclusions.

The areas in which I believe the evidence to date is too mixed, or even nonexistent, includes consumption and labor supply decisions over time, the interaction of work requirements with human capital development and subsequent earnings, health and fertility outcomes of mothers, living arrangements of children, and welfare use across generations. Regarding the latter, a key argument made by policymakers in favor of the TANF program, especially the introduction of time limits and work requirements, was to break the dependence on welfare not only for the current cohort of recipients, but also for their children. To my knowledge there has been no study on the intergenerational transmission of welfare post TANF. I would add to this list a need to sort out some of the current conflicting evidence on child well being that arises from demonstrations, leaver studies, and observational studies —young children versus adolescents—in terms of physical and emotional health. The historical underpinning of TANF is on improving child welfare, and yet some of our weakest causal evidence to date on welfare reform is in this domain. Some of this is due to lack of national data on child outcomes, some due to underreporting in surveys, and some due to lack of access to geocoded data necessary to link outcomes to local policy environments. This is an area where more widespread access to secure data sites, such as Census Research Data Centers that also house major health surveys, would foster new research on welfare reform.

Our knowledge base of the effects of welfare reform is also limited by the fact that with very few exceptions all the evidence comes from the first five years after the introduction of TANF. This is a real shortcoming because many of the outcomes of interest are likely to be realized only after many years. It is also disconcerting because as depicted in Figure 9, the flow of new research on welfare reform has tapered off significantly in recent years, and how lowincome families and their children have fared during the Great Recession across these domains is largely unknown. Some of this reduced research flow may be from the misguided perception that TANF is now a "small" program in the safety net and thus less interesting to study. To be certain, programs like SNAP, SSI, and the EITC are larger in terms of annual appropriations, but at \$30-\$35 billion per year, TANF is still a significant player in the safety net, and touches many more American families than caseload figures indicate because the latter only capture cash assistance whereas two-thirds of spending today is on nonassistance. Moreover, there is ongoing discussion among some members of Congress to block grant SNAP and Medicaid, using TANF as a model. The limited evidence to date suggests that TANF did not respond to the Great Recession, and this lack of business-cycle response contributed to the growth of deep poverty. There has been scant research in the last decade on the implications of TANF financing for state budgets and family well being. Thus, an expanded research base is needed to not only assess TANF, but also to offer guidance for evidence-based policy discussions on the wider safety net.

References

Ashenfelter, Orley. 1983. "Determining Participation in Income-Tested Social Programs." *Journal of the American Statistical Association* 78(383): 517-525.

Barr, Nicholas A., and Robert E. Hall. 1981. "The Probability of Dependence on Public Assistance." *Economica* 48(190): 109-123.

Bartik, Timothy, and Randall Eberts. 1999. "Examining the Effect of Industry Trends and Structure on Welfare Caseloads." In *Economic Conditions and Welfare Reform*. Sheldon Danziger, ed., Kalamazoo, MI: Upjohn Institute, 119–157.

Becker, Gary, and Nigel Tomes. 1979. "An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility." *Journal of Political Economy* 87(6): 1153-1189.

Ben Porath, Yoram. 1967. "The Production of Human Capital and the Life Cycle of Earnings." *Journal of Political Economy* 75(4): 352-365.

Berger, Mark, and Dan Black. 1992. "Child care subsidies, quality of care, and the labor supply of low-income, single mothers." *The Review of Economics and Statistics*,

74, 635–642.

Bernal, Raquel, and Michael P. Keane. 2011. "Child Care Choices and Children's Cognitive Achievement: The Case of Single Mothers." *Journal of Labor Economics*, 29(3): 459-512.

Bitler, Marianne P., and Hilary W. Hoynes. 2008. "Welfare Reform and Indirect Impacts on Health," in *Making Americans Healthier: Social and Economic Policy as Health Policy*, Robert F. Schoeni, James S. House, George A. Kaplan, and Harold Pollack (eds.), New York: Russell Sage Foundation, 231-280.

Bitler, Marianne P., and Hilary W. Hoynes. 2010. "The State of the Safety Net in the Post-Welfare Reform Era." *Brookings Papers on Economic Activity* (Fall): 71-127.

Bitler, Marianne P., and Hilary W. Hoynes. 2013. "Immigrants, Welfare Reform, and the U.S. Safety Net." In *Immigration, Poverty, and Socioeconomic Inequality*, David Card and Steven Raphael (eds.), New York: Russell Sage Foundation.

Bitler, Marianne P., and Hilary W. Hoynes. Forthcoming. "The More Things Change the More They Stay the Same? The Safety Net and Poverty in the Great Recession." *Journal of Labor Economics*.

Bitler, Marianne P., Jonah B. Gelbach, and Hilary W. Hoynes. 2003. "Some Evidence on Race, Welfare Reform, and Household Income." *The American Economic Review Papers and Proceedings*, 93(2): 293-298.

Bitler, Marianne P., Jonah B. Gelbach, and Hilary W. Hoynes. 2005. "Welfare Reform and Health." *Journal of Human Resources*, 40: 309-34.

Bitler, Marianne P., Jonah B. Gelbach, and Hilary W. Hoynes. 2006a. "What Mean Impacts Miss: Distributional Effects of Welfare Reform Experiments." *American Economic Review* 96(4): 988-1012.

Bitler, Marianne P., Jonah B. Gelbach, and Hilary W. Hoynes. 2006b. "Welfare Reform and Children's Living Arrangements." *Journal of Human Resources* 41: 1-27.

Bitler, Marianne P., Jonah B. Gelbach, HilaryW. Hoynes, and Madeline Zavodny. 2004. "The impact of welfare reform on marriage and divorce." *Demography* 41(2):213-236.

Blank, Rebecca. 1989. "Analyzing the Length of Welfare Spells." *Journal of Public Economics* 39(3): 245-273.

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

Blank, Rebecca. 2002. "Evaluating Welfare Reform in the United States." *Journal of Economic Literature* 40(4): 1105–1166.

Blank, Rebecca. 2009. "What We Know, What We Don't Know, and What We Need to Know about Welfare Reform." In *Welfare Reform and its Long-Term Consequences for America's Poor*, James P. Ziliak (ed.), Cambridge University Press, 22-58.

Blank, Rebecca M. and Brian Kovak. 2009. "The Growing Problem of Disconnected Single Mothers." In *Making the Work-Based Safety Net Work Better: Forward-Looking Policies to Help Low-Income Families*, Carolyn J. Heinrich and John Karl Scholz (eds.), New York: Russell Sage Foundation.

Blau, David, and Janet Currie. 2006. "Preschool, Day Care and After-School Care: Who's Minding the Kids." In *Handbook of Economics of Education*, Eric Hanushek and Finis Welch (eds.), New York: North Holland, 1163-1278.

Blomquist, N. Soren. 1985. "Labor Supply in a Two-Period Model: The Effect of a Nonlinear Progressive Income Tax." *Review of Economic Studies* 52(2): 515-524.

Bloom, Dan, Pamela J. Loprest, and Sheila R. Zedlewski. 2011. "TANF Recipients with Barriers to Employment." Temporary Assistance for Needy Families Research Synthesis Brief #8, Washington, DC: The Urban Institute.

Blundell, Richard, Luigi Pistaferri, and Ian Preston. 2008. "Consumption Inequality and Partial Insurance." American Economic Review 98(5): 1887-1921.

Bollinger, Christopher, Luis Gonzalez, and James P. Ziliak. 2009. "Welfare Reform and the Level and Composition of Income." In *Welfare Reform and its Long-Term Consequences for America's Poor*, James P. Ziliak (ed.), Cambridge University Press, 59-103.

Borjas, George J. 1999. "Immigration and Welfare Magnets." *Journal of Labor Economics* 17(4): 604-637.

Borjas, George J. 2005. "Welfare Reform, Labor Supply, and Health Insurance in the Immigrant Population." *Journal of Health Economics* 22(6): 933-958.

Brueckner, Jan. 2000. "Welfare Reform and the Race to the Bottom: Theory and Evidence." *Southern Economic Journal* 66(3): 505-525.

Bucklin, Dorothy. 1939. "Public Aid for the Care of Dependent Children in Their Homes, 1932-38." *Social Security Bulletin* 2(4): 24-35.

Burtless, Gary. 1990. "The Economist's Lament: Public Assistance in America." *Journal of Economic Perspectives* 4(1): 57-78.

Cadena, Brian, Sheldon Danziger, and Kristin Seefeldt. 2006. "Measuring State Welfare Policy Changes: Why Don't They Explain Caseload and Employment Outcomes?" *Social Science Quarterly* 87(4): 808-817.

Cancian, Maria, and Daniel R. Meyer. 2004. "Alternative Measures of Economic Success among TANF Participants: Avoiding Poverty, Hardship and Dependence on Public Assistance." *Journal of Policy Analysis and Management* 23(3):531-548.

Cancian, Maria, and Deborah Reed. 2009. "Changes in Family Structure, Childbearing, and Employment: Implications for the Level and Trend in Poverty." In Maria Cancian and Sheldon Danziger, Eds, *Changing Poverty*. New York: Russell Sage Foundation.

Cancian, Maria, Robert Haveman, Daniel Meyer, and Barbara Wolfe. 2002. "Before and After TANF: The Economic Well-Being of Women Leaving Welfare." *Social Service Review*, 76(4): 603-641.

Capps, Randy, Michael Fix, and Everett Henderson. 2009. "Trends in Immigrants' Use of Public Assistance after Welfare Reform." In *Immigrants and Welfare*, Michael Fix (ed.), New York: Russell Sage Foundation.

Cawley, John, Mathias Schroeder, and Kosali Simon. 2006. "How Did Welfare Reform Affect the Health Insurance Coverage of Women and Children?" *Health Services Research* 41(2): 486-506.

Chan, Marc. 2013. "A Dynamic Model of Welfare Reform." *Econometrica* 81(3): 941-1001.

Chase-Lansdale, P. Lindsay, Robert A. Moffitt, Brenda J. Lohman, Andrew J. Cherlin, Rebekah Levine Coley, Laura D. Pittman, Jennifer Roff, Elizabeth Votruba-Drzal. 2003. "Mothers' Transitions from Welfare to Work and the Well-Being of Preschoolers and Adolescents." Science, 299: 1548-52.

Cherlin, Andrew J., and Paula Fomby. 2004. "Welfare, Work and Changes in Mothers' Living Arrangements in Low-Income Families." *Population Research and Policy Review*, 23(5-6): 543-565.

Chernick, Howard. 1998. "Fiscal Effects of Block Grants for the Needy: An Interpretation of the Evidence." *International Tax and Public Finance* 5(2): 205-233.

Chernick, Howard, and Therese McGuire. 1999. "The States, Welfare Reform, and the Business Cycle." In *Economic Conditions and Welfare Reform*. Sheldon Danziger, ed., Kalamazoo, MI: Upjohn Institute, 275–303.

Chief, Elizabeth. 1979. "Need Determination in AFDC Program." *Social Security Bulletin* 42(9): 11-21.

Child Trends. 2014. *Births to Unmarried Women: Indicators on Children and Youth*. http://www.childtrends.org/wp-content/uploads/2012/11/75_Births_to_Unmarried_Women.pdf Corman, Hope, Dhaval Dave, Dhiman Das, and Nancy Reichman. 2013. "Effects of Welfare Reform on Illicit Drug Use of Adult Women." *Economic Inquiry* 51(1): 653-674.

Council of Economic Advisers. 1997. Technical Report: Explaining the decline in welfare receipt, 1993-1996. Washington DC: Executive Office of the President.

Council of Economic Advisers. 1999. Technical Report: The Effects of Welfare Policy and the Economic Expansion on Welfare Caseloads: An Update. Washington DC: Executive Office of the President.

Dahl, Gordon, and Lance Lochner. 2012. "The Impact of Family Income on Child Achievement: Evidence from the Earned Income Tax Credit." *American Economic Review* 102(5): 1927-1956.

Danielson, Caroline, and Jacob Klerman. 2008. "Did Welfare Reform Cause the Caseload Decline?" *Social Service Review* 82(4): 703–30.

Danziger, Sandra K., Mary Corcoran, Sheldon Danziger, Colleen Heflin, Ariel Kalil, Judith Levine, Daniel Rosen, Kristin Seefeldt, Kristine Siefert, Richard Tolman. 2000. "Barriers to the Employment of Welfare Recipients." In *Prosperity for all?*, Robert Cherry and William Rodgers (eds.), New York: Russell Sage Foundation, 239-272..

Danziger, Sheldon, Colleen Heflin, Mary Corcoran, Elizabeth Oltmans, and Hui-Chen Wang. 2002. "Does it Pay to Move from Welfare to Work?" *Journal of Policy Analysis and Management* 21(4): 671-692.

Danziger, Sheldon, and Hui-Chen Wang. 2005. "Does it Pay to Move from Welfare to Work? Reply to Robert Moffitt and Katie Winder." *Journal of Policy Analysis and Management* 24(2): 411-417.

Danziger, Sheldon, Robert Haveman, and Robert Plotnick. 1981. "How Income Transfers Affect Work, Savings, and the Income Distribution: A Critical Review." *Journal of Economic Literature* 19(3): 975-1028.

Dave, Dhaval, Hope Corman, and Nancy Reichman. 2012. "Effects of Welfare Reform on Education Acquisition of Adult Women." *Journal of Labor Research* 33(2): 251-282.

De Jong, Gordon F., Deborah Roempke Graete, Shelley K. Irving, and Tonja St. Pierre. 2006. "Measuring State TANF Policy Variations and Change After Reform." *Social Science Quarterly* 87(4): 755-781.

DeLeire, Thomas, Judith A. Levine, and Helen Levy. 2006. "Is Welfare Reform Responsible for Low-Skilled Women's Declining Health Insurance Coverage in the 1990s?" Journal of Human Resources 41(3): 495-528.

Duncan, Greg J., Aletha C. Huston, and Thomas S. Weisner. 2008. *Higher Ground: New Hope for the Working Poor and their Children*. New York: Russell Sage Foundation.

Duncan, Greg J., Hans Bos, Lisa L. Gennetian, and Heather Hill. 2009. "New Hope: A Thoughtful and Effective Approach to "Make Work Pay"," *Northwestern Journal of Law and Social Policy* 4(1): 100-115.

Dunifon, Rachel, Kathryn Hynes, and H. Elizabeth Peters. 2009. "State Welfare Policies and Children's Living Arrangements," *Social Service Review* 83(3): 351-388.

Dyke, Andrew, Carolyn J. Heinrich, Peter R. Mueser, Kenneth R. Troske, Kyung-Seong Jeon. 2006. "The Effects of Welfare-to-Work Program Activities on Labor Market Outcomes," *Journal of Labor Economics* 24(3): 567-608.

Ellwood, David. 1999. "The Impact of the Earned Income Tax Credit and Social Policy Reforms on Work, Marriage, and Living Arrangements." *National Tax Journal* 53(4, Part 2): 1063–1105.

Falk, Gene. 2012. "The Temporary Assistance for Needy Families (TANF) Block Grant: A Primer on TANF Financing and Federal Requirements." CRS Report for Congress, Congressional Research Service, Washington, DC.

Fang, Hanming, and Michael P. Keane. 2004. "Assessing the Impact of Welfare Reform on Single Mothers." *Brookings Papers on Economic Activity*, 2004: 1-116.

Fang, Hanming, and Dan Silverman. 2009. "Time-Inconsistency and Welfare Program Participation." *International Economic Review* 50(4): 1043-1077.

Figlio, David N., and James P. Ziliak. 1999. "Welfare Reform, the Business Cycle, and the Decline in AFDC Caseloads." In *Economic Conditions and Welfare Reform*, Sheldon Danziger (ed.), Kalamazoo, MI: Upjohn Institute For Employment Research, 17-48.

Fishback, Price, and Melissa Thomasson. 2006. "Social Welfare: 1929 to the Present," in *Historical Statistics of the United States: Colonial Times to the Present*, Millennial Edition On Line, Susan B. Carter, et al. (eds.), Cambridge University Press, pp. 700-719.

Fitzgerald, John. 1991. "Welfare Durations and the Marriage Market: Evidence from the Survey of Income and Program Participation." *Journal of Human Resources* 26(3): 545-561.

Fitzgerald, John M., and David C. Ribar. 2004. "Welfare Reform and Female Headship." *Demography* 41(2):189–212.

Fix, Michael E., and Jeffrey S. Passel. 1999. "Trends in Noncitizens' and Citizens' Use of Public Benefits Following Welfare Reform: 1994–1997." Washington, D.C.: The Urban Institute.

Fording, Richard C., Joe Soss, and Sanford F. Schram. 2007. "Devolution, Discretion, and the Effect of Local Political Values on TANF Sanctioning." *Social Service Review* 81(2): 285-316.

Fraker, Thomas, Robert Moffitt, and Douglas Wolf. 1985. "Effective Tax Rates and Guarantees in the AFDC Program, 1967–1982." *Journal of Human Resources* 20(2): 251–263.

Frogner, Bianca, Robert Moffitt, and David Ribar. 2009. "How Families Are Doing Nine Years after Welfare Reform: 2005 Evidence from the Three-City Study." In *Welfare Reform and its Long-Term Consequences for America's Poor*, James P. Ziliak (ed.), Cambridge University Press, 140-171.

Garfinkel, Irv, Chien-Chung Huang, Sara S. McLanahan, and Daniel S. Gaylin. 2003. "The Roles of Child Support Enforcement and Welfare in Non-marital Childbearing." *Journal of Population Economics* 16(1):55-70.

Gelbach, Jonah. 2004. "Migration, the Life Cycle, and State Benefits: How Low in the Bottom?" *Journal of Political Economy* 112(5): 1091-1130.

Germanis, Peter. 2015. "TANF is Broken! It's time to Reform "Welfare Reform." Unpublished manuscript.

Gordon, Linda, and Felice Batlan. 2011. "The Legal History of the Aid to Dependent Children Program." Retrieved February 12, 2015 from http://www.socialwelfarehistory.com/programs/aid-to-dependent-children-the-legal-history/.

Graefe, Deborah R., and Daniel T. Lichter. 2008. "Marriage patterns among unwed mothers: Before and after PRWORA." *Journal of Policy Analysis and Management* 27(3): 479-497.

Green Book. 1998. "Section 7-Aid to Families with Dependent Children and Temporary Assistance for Needy Families (Title-IVA)." Background Material and Data on the Programs within the Jurisdiction of the Committee on Ways and Means, U.S. Congress.

Green Book. 2008. "Section 7-Temporary Assistance for Needy Families (TANF)." Background Material and Data on the Programs within the Jurisdiction of the Committee on Ways and Means, U.S. Congress.

Grogger, Jeffrey. 2003. "The Effects of Time Limits, the EITC, and Other Policy Changes on Welfare Use, Work, and Income Among Female-Headed Families." *Review of Economics and Statistics* 85(2): 394–408.

Grogger, Jeffrey. 2004. "Time Limits and Welfare Use." *Journal of Human Resources* 39(2): 405-424.

Grogger, Jeffrey, and Charles Michalopoulos. 2003. "Welfare Dynamics Under Time Limits." *Journal of Political Economy* 111(3): 530–554.

Grogger, Jeffrey, and Lynn A. Karoly. 2005. *Welfare Reform: Effects of a Decade of Change*. Harvard University Press.

Grogger, Jeffrey, Steven J. Haider and Jacob Klerman. 2003. "Why Did the Welfare Rolls Fall during the 1990s?" *American Economic Review Papers and Proceedings*, 93(2):288-92.

Grossman, Michael. 1972. "On the Concept of Health Capital and the Demand for Health." *Journal of Political Economy* 80(2): 223-255.

Gruber, Jonathan. 2000. "Cash Welfare as a Consumption Smoothing Mechanism for Single Mothers," *Journal of Public Economics* 75(2): 157–182.

Gruber, Jonathan. 2000. "Medicaid," In *Means-Tested Transfer Programs in the United States*, Robert Moffitt (ed.), University of Chicago Press.

Gundersen, Craig, and James P. Ziliak. 2004. "Poverty and Macroeconomic Performance across Space, Race, and Family Structure." *Demography* 41(1): 61–86.

Hahn, Heather McCallum, and Rachel Frisk. 2010. "Temporary Assistance for Needy Families: Implications of Recent Legislative and Economic Changes for State Programs and Work Participation." United States Government Accountability Office, GAO-10-525.

Haider, Steven J., Alison Jacknowitz, and Robert F. Schoeni. 2003. "Welfare Work Requirements and Child Well-being: Evidence from the Effects on Breast-feeding." *Demography* 40(3):479-497.

Haider, Steven J., and Jacob Klerman. 2005. "Dynamic Properties of the Welfare Caseload." *Labour Economics*, 12(5): 629-648.

Haider, Steven J., Robert F. Schoeni, Yuhua Bao, and Caroline Danielson. 2004. "Immigrants, Welfare Reform, and the Economy." *Journal of Policy Analysis and Management*, 23(4):745-764.

Ham, John C., Xianghong Li, and Lara Shore-Sheppard. 2009. "A Reexamination of the Impact of Welfare Reform on Health Insurance Among Less-Skilled Women." In *Welfare Reform and its Long-Term Consequences for America's Poor*, James P. Ziliak (ed.), Cambridge, UK: Cambridge University Press, 217-254.

Hansan, John E. 2011. "English poor laws: Historical precedents of tax-supported relief for the poor." Retrieved 11/10/2014 from <u>http://www.socialwelfarehistory.com/programs/poor-laws/</u>.

Hao, Lingxin, and Andrew J. Cherlin. 2004. "Welfare Reform and Teenage Pregnancy, Childbirth, and School Dropout." *Journal of Marriage and the Family* 66(1): 179-94.

Haskins, Ronald. 2007. *Work over Welfare: The Inside Story of the 1996 Welfare Reform Law.* Washington, DC: Brookings Institution Press.

Haskins, Ronald. 2009. "Limiting Welfare Benefits for Noncitizens: Emergence of Compromises," In *Immigrants and Welfare*, Michael E. Fix (ed.), New York: Russell Sage Foundation.

Heckman, James, Jora Stixrud, and Sergio Urzua. 2006. "The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior." *Journal of Labor Economics*, 24(3): 411-482.

Heckman, James, Lance Lochner, and Ricardo Cossa. 2003. "Learning-By-Doing Versus Onthe-Job Training: Using Variation Induced by the EITC to Distinguish Between Models of Skill Formation." in Edmund Phelps, ed., *Designing Inclusion: Tools to Raise Low-end Pay and Employment in Private Enterprise*, Cambridge, UK: Cambridge University Press, 74-130.

Heflin, Colleen. 2006. "Dynamics of Material Hardship in the Women's Employment Study." *Social Service Review* 80(3): 377-397.

Heflin, Colleen and Sharon Kukla Acevedo. 2011. "Welfare Receipt and Early Childhood Cognitive Scores." *Children and Youth Services Review* 33 (5):634-643.

Herbst, Chris M. 2013. "Welfare Reform and the Subjective Well Being of Single Mothers." *Journal of Population Economics* 26(1): 203-238.

Herbst, Chris M. 2014. "Are Parental Welfare Work Requirements Good for Disadvantaged Children? Evidence from Age-of-Youngest Child Exemptions." IZA Discussion Paper No. 8485.

Holl, Jane L., Kristin Shook Slack, and Amy Bush Stevens. 2005. "Welfare Reform and Health Insurance: Consequences for Parents." *American Journal of Public Health* 95(2): 279-85.

Horvath-Rose, Ann E., H. Elizabeth Peters, and Joseph J. Sabia. 2008. "Capping Kids: The Family Cap and Non-marital Childbearing," *Population Research and Policy Review* 27(2): 119-138.

Hotz, V. Joseph, Guido Imbens, and Jacob Klerman. 2006. "Evaluating the Differential Effects of Alternative Welfare-to-Work Training Components: A Re-evaluation of the California GAIN Program." *Journal of Labor Economics* 24(3): 521-566.

Hoynes, Hilary. 1996. "Welfare Transfers in Two-Parent Families: Labor Supply and Welfare Participation Under AFDC-UP." *Econometrica* 64(2): 295-332.

Hoynes, Hilary. 2000. "Local Labor Markets and Welfare Spells: Do Demand Conditions Matter?" *Review of Economics and Statistics* 82(3): 351-368.

Hoynes, Hilary, and Thomas MaCurdy. 1994. "Has the Decline in Benefits Shortened Welfare Spells?" *The American Economic Review Papers and Proceedings* 84(2): 43-48.

Huang, Chien-Chung, Irwin Garfinkel, and Jane Waldfogel. 2004. "Child Support Enforcement and Welfare Caseloads." *Journal of Human Resources*, 39(1):108-34.

Hubbard, R.Glenn, Jonathan Skinner, and Stephen Zeldes. 1995. "Precautionary Saving and Social Insurance." *Journal of Political Economy*, 103(2), 360-399.

Hurst, Erik and James P. Ziliak. 2006. "Do Welfare Asset Limits Affect Household Saving? Evidence from Welfare Reform." *Journal of Human Resources* 41(1): 46-71.

Hutchens, Robert. 1978. "Changes in AFDC Tax Rates: 1967–71." *Journal of Human Resources* 13(1): 60–74.

Jacob, Brian, Max Kapustin, and Jens Ludwig. 2015. "The Impact of Housing Assistance on Child Outcomes: Evidence from a Randomized Housing Lottery." *The Quarterly Journal of Economics* 130(1).

Joyce, Theodore, Robert Kaestner and Sanders Korenman. 2003. "Welfare Reform and Nonmarital Fertility in the 1990s: Evidence from Birth Records." *Advances in Economic Analysis and Policy* 3(1): Article Number 6.

Joyce, Theodore, Robert Kaestner, Sanders Korenman, and Stanley Henshaw. 2004. "Family Cap Provisions and Changes in Births and Abortions." *Population Research and Policy Review* 23(5-6): 475-511.

Kaestner Robert, and Elizabeth Tarlov. 2006. "Changes in the Welfare Caseload and the Health of Low-Educated Mothers." *Journal of Policy Analysis and Management* 25(3): 623-43.

Kaestner, Robert, and Neeraj Kaushal. 2003. "Welfare Reform and Health Insurance Coverage of Low Income Families." *Journal of Health Economics* 22(6):959–81.

Kaestner, Robert, and Neeraj Kaushal. 2005. "Immigrant and Native Responses to Welfare Reform." *Journal of Population Economics*, 18(1): 69-92.

Kaestner, Robert, Sanders Korenman, and June O'Neill. 2003. "Has Welfare Reform Changed Teenage Behaviors?" *Journal of Policy Analysis and Management* 22(2): 225-248.

Kaiser Commission on Medicaid and the Uninsured. 2012. "Medicaid Financing: An Overview of the Federal Medicaid Matching Rate (FMAP)." The Henry J. Kaiser Family Foundation, Policy Brief #8352.

Kalil, Ariel, Kristin S. Seefeldt, and Hui-chen Wang. 2002. "Sanctions and Material Hardship under TANF." *Social Service Review* 76(4): 642-662.

Kalil, Ariel, and Kathleen Ziol-Guest. 2009. "Welfare Reform and Health among the Children of Immigrants." In *Welfare Reform and its Long-Term Consequences for America's Poor*, James P. Ziliak (ed.), Cambridge University Press, 308-336.

Kalil, Ariel, and Rachel Dunifon. 2007. Maternal work and welfare use and child well-being: Evidence from six years of data from the Women's Employment Study. *Children and Youth Services Review* 29, 742-761.

Kassabian, David, Erika Huber, Elissa Cohen, and Linda Giannarelli. 2013. *Welfare Rules Databook: State TANF Policies as of July 2012*. OPRE Report 2013-27, U.S. Department of Health and Human Services.

Katz, Michael B. 1986. In the Shadow of the Poorhouse. Basic Books.

Kaushal, Neeraj. 2005. "New Immigrants' Location Choices: Magnets without Welfare." *Journal of Labor Economics* 23(1): 59-80.

Kaushal, Neeraj, Qin Gao, and Jane Waldfogel. 2007. "Welfare Reform and Family Expenditures on Children." *Social Service Review* 81(3): 369-396.

Kaushal, Neeraj, and Robert Kaestner. 2001. "From Welfare to Work: Has Welfare Reform Worked?" *Journal of Policy Analysis and Management* 20(4): 699-719.

Keane, Michael, and Kenneth Wolpin. 2002a. "Estimating Welfare Effects Consistent with Forward-Looking Behavior. Part I: Lessons from a Simulation Exercise." *Journal of Human Resources* 37(3): 570-599.

Keane, Michael, and Kenneth Wolpin. 2002b. "Estimating Welfare Effects Consistent with Forward-Looking Behavior. Part II: Empirical Results." *Journal of Human Resources* 37(3): 600-622.

Keane, Michael, and Kenneth Wolpin. 2010. "The Role of Labor and Marriage Markets, Preference Heterogeneity, and the Welfare System in the Life Cycle Decisions of Black, Hispanic, and White Women." *International Economic Review* 51(3): 851-892.

Keane, Michael, and Robert Moffitt. 1998. "A Structural Model of Multiple Welfare Program Participation and Labor Supply." *International Economic Review* 39(3):553-589.

Kearney, Melissa Schettini. 2004. "Is There an Effect of Incremental Welfare Benefits on Fertility Behavior?" *Journal of Human Resources* 39(2): 295-325.

Kennan, John, and James R. Walker. 2010. "Wages, Welfare Benefits, and Migration." *Journal of Econometrics* 156(1): 229-238.

Klerman, Jacob, and Steven J. Haider. 2004. "A Stock-Flow Analysis of the Welfare Caseload." *Journal of Human Resources*, 39(4):865-886.

Knab, Jean, Irv Garfinkel, Sara McLanahan, Emily Moududdin, and Cynthia Osborne. 2009.ak. 2009. "The Effects of Welfare and Child Support Policies on the Incidence of Marriage

Following a Nonmarital Birth." In *Welfare Reform and its Long-Term Consequences for America's Poor*, James P. Ziliak (ed.), Cambridge University Press, 290-307.

Kniesner, Thomas J., and James P. Ziliak. 2002. "Explicit versus Implicit Income Insurance," *Journal of Risk and Uncertainty* 25(1): 5–20.

Knox, Virginia, Cynthia Miller, and Lisa Gennetian. 2000. *Reforming Welfare and Rewarding Work: A Summary of the Final Report on the Minnesota Family Investment Program*. New York: MDRC.

Lamarche, Carlos, and Robert Paul Hartley. 2014. "Distributional Effects of Welfare Reform Experiments: A Panel Quantile Regression Examination." University of Kentucky Center for Poverty Research Discussion Paper 2014-11.

Lofstrom, Magnus, and Frank D. Bean. 2002. "Assessing Immigrant Policy Options: Labor Market Conditions and Post-Reform Declines in Welfare Receipt among Immigrants." *Demography* 39(4): 617–37.

Lopoo, Leonard M., and Thomas DeLeire. 2006. "Did Welfare Reform Influence the Fertility of Young Teens?" *Journal of Policy Analysis and Management*, 25: 275-95.

Loprest, Pamela J. 2012. "How Has the TANF Caseload Changed Over Time?" Temporary Assistance for Needy Families Research Synthesis Brief #8, Washington, DC: The Urban Institute.

Lower-Basch, Elizabeth. 2011. "Guide to TANF Funds." *TANF Policy Brief*, Center for Law and Social Policy, Washington, DC.

Lurie, Irene. 1974. "Estimates of Tax Rates in the AFDC Program." *National Tax Journal* 27(1): 93–111.

Mazzolari, Francesca. 2007. "Welfare Use when Approaching the Time Limit." *Journal of Human Resources* 42(3), 596-618.

McGuire, Therese and David F. Merriman. 2006. "State Spending on Social Assistance Programs Over the Business Cycle." In *Working and Poor: How Economic and Policy Changes Are Affecting Low-Wage Workers*, Rebecca Blank, Sheldon Danziger, and Robert Schoeni, eds., New York, NY: Russell Sage Foundation.

McKernan, Signe-Mary, Caroline Ratcliffe, and Yunju Nam. 2008. "Do Welfare and IDA Program Policies Affect Asset Holdings?" *Opportunity and Ownership Project* Brief #10. Washington, DC: The Urban Institute.

McKernan, Signe-Mary, Jen Bernstein, and Lynne Fender. 2005. "Taming the Beast: Categorizing State Welfare Policies: A Typology of Welfare Policies Affecting Recipient Job Entry." *Journal of Policy Analysis and Management* 24(2): 443-460. McKinnish, Terra. 2007. "Cross-Border Welfare Migration: New Evidence from Micro Data." *Journal of Public Economics* 91(3-4): 437-450.

McKinnish, Terra, Seth Sanders, and Jeffrey Smith. 1999. "Estimates of Effective Guarantees and Tax Rates in the AFDC Program for the Post-OBRA Period." *Journal of Human Resources* 34(2): 312–345.

Michalopoulos, Charles, Doug Tattrie, Cynthia Miller, Philip K. Robins, Pamela Morris, David Gyarmati, Cindy Redcross, Kelly Foley and Reuben Ford. 2002. *Making Work Pay: Final Report on the Self-Sufficiency Project for Long-Term Welfare Recipients*. Social Research Demonstration Corporation.

Meyer, Bruce D., and Dan T. Rosenbaum. 2001. "Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers." *Quarterly Journal of Economics* 116(3): 1063-1114.

Meyer, Bruce, and James X. Sullivan. 2004. "The Effects of Welfare and Tax Reform: The Material Well-Being of Single Mothers in the 1980s and 1990s." *Journal of Public Economics* 88: 1387-1420.

Meyer, Bruce D., and James X. Sullivan. 2008. "Changes in the Consumption, Income, and Well Being of Single Mother Families." *American Economic Review* 98(5): 2221-2241.

Miller, Amalia, and Lei Zhang. 2012. "Intergenerational Effects of Welfare Reform on Educational Attainment." *Journal of Law and Economics* 55(2): 437–476.

Mills, Bradford, Jeffrey Alwang, and Gautum Hazarika. 2001. "Welfare Reform and the Well Being of Single Female Headed Families: A Semi-Parametric Analysis." *Review of Income and Wealth* 47(1): 81–104.

Moffitt, Robert A. 1983. "An Economic Model of Welfare Stigma." *American Economic Review* 73(5): 1023-1035.

Moffitt, Robert A. 1987. "Historical Growth in Participation in Aid to Families with Dependent Children: Was There a Structural Shift?" *Journal of Post Keynesian Economics* 9(3): 347-363.

Moffitt, Robert A. 1990. "Has State Redistribution Policy Grown More Conservative?" *National Tax Journal* 43(2): 123-142.

Moffitt, Robert A. 1992. "Incentive Effects of the U.S. Welfare System: A Review." *Journal of Economic Literature* 30(1): 1–61.

Moffitt, Robert A. 1999. "The Effect of Pre-PRWORA Waivers on AFDC Caseloads and Female Earnings, Income, and Labor Force Behavior." *Economic Conditions and Welfare Reform*. Sheldon Danziger, ed., Kalamazoo, MI: Upjohn Institute, 91–118.

Moffitt, Robert A. 2003. "Temporary Assistance for Needy Families." In *Means-Tested Transfer Programs in the United States*, Robert Moffitt (ed.), University of Chicago Press.

Moffitt, Robert A. 2015. "Multiple Program Participation and the SNAP Program." *SNAP Matters: How Food Stamps Affect Health and Well Being*. Judith Bartfeld, Craig Gundersen, Timothy Smeeding, and James Ziliak, editors, Stanford, CA: Stanford University Press, 213-242.

Moffitt, Robert A., and David W. Stevens. 2001. "Changing Caseloads: Macro Influences and Micro Composition." *Economic Policy Review*, Federal Reserve Bank of New York, September: 37-51.

Moffitt, Robert A., and John Karl Scholz. 2010. "Trends in the Level and Distribution of Income Support." In *Tax Policy and the Economy*, Jeffrey Brown (ed.), 111-152.

Moffitt, Robert, and Katie Winder. 2005. "Does it Pay to Move from Welfare to Work?" A Comment on Danziger, Heflin, Corcoran, Oltmans, and Wang." *Journal of Policy Analysis and Management* 24(2): 399-409.

Moffitt, Robert, Robert Reville, and Anne Winkler. 1998. "Beyond Single Mothers: Cohabitation and Marriage in the AFDC Program." *Demography* 35(3): 259-278.

Morris, Pamela, Lisa Gennetian, Greg Duncan, and Aletha Huston. 2009. "How Welfare Policies Affect Child and Adolescent School Performance: Investigating Pathways of Influence with Experimental Data." In *Welfare Reform and its Long-Term Consequences for America's Poor*, James P. Ziliak, ed, Cambridge, UK: Cambridge University Press, 255-289.

Morris, Pamela and Richard Hendra. 2009. "Losing the Safety Net: How Welfare Time Limits Affect Families and Children?" *Developmental Psychology* 45(2): 383-400.

Mueser, Peter R., David W. Stevens, and Kenneth R. Troske. 2009. "The Impact of Welfare Reform on Leaver Characteristics, Employment, and Recidivism: An Analysis of Maryland and Missouri." In *Welfare Reform and its Long-Term Consequences for America's Poor*, James P. Ziliak (ed.), Cambridge University Press.

Murray, Charles. 1984. Losing Ground: American Social Policy, 1950-1980. New York: Basic Books.

Office of Family Assistance. 2013. "TANF Tenth Report to Congress." Administration for Children & Families, U.S. Department of Health and Human Services, <u>http://www.acf.hhs.gov/sites/default/files/ofa/10th_tanf_report_congress.pdf</u>

Office of Family Assistance. 2014. "TANF Contingency Fund Awards, 2014." Administration for Children & Families, U.S. Department of Health and Human Services, http://www.acf.hhs.gov/programs/ofa/resource/tanf-contingency-fund-awards-2014. Offner, Paul. 2005. "Welfare Reform and Teenage Girls." *Social Science Quarterly* 86(2): 306-322.

Parrott, Sharon, et al. 2007. *Implementing the TANF Changes in the Deficit Reduction Act: "Win-Win" Solutions for Families and States.* Center of Budget and Policy Priorities and Center for Law and Social Policy, Washington, DC.

Paxson, Christina, and Jane Waldfogel. 2003. "Welfare Reforms, Family Resources, and Child Maltreatment." *Journal of Policy Analysis and Management* 22(1): 85-113.

Peters, H. Elizabeth, Laura M. Argys, Heather W. Howard, and J. S. Butler 2004. "Legislating Love: The Effect of Child Support and Welfare Policies on Father-Child Contact," *Review of Economics of the Household* 2(3): 255-274.

Powers, Elizabeth. 1998. "Does Means-Testing Welfare Discourage Saving? Evidence from a Change in AFDC Policy in the United States." *Journal of Public Economics* 68(1): 33-53.

Powers, Elizabeth. 1999. "Block Granting Welfare: Fiscal Impact on the States." Assessing the New Federalism, Occasional Paper Number 23, Washington, DC: The Urban Institute.

Primus, Wendell, Lynette Rawlings, Kathy Larin, and Kathryn Porter 1999. "The Initial Impacts of Welfare Reform on the Incomes of Single-Mother Families." Washington, DC: Center on Budget and Policy Priorities.

Raphael, Steven and Lorien Rice. 2002. "Car Ownership, Employment, and Earnings," *Journal of Urban Economics* 52(1): 109-130.

Ribar, David, and Mark Wilhelm. 1999. "The Demand for Welfare Generosity." *Review of Economics and Statistics* 81(1): 96–108.

Riccio, James, and Daniel Friedlander. 1992. *GAIN: Program strategies, participation patterns, and first-year impacts in six counties.* New York: Manpower Demonstration Research Corporation.

Riccio, James, Daniel Friedlander, and Stephen Freedman. 1994. *GAIN: Benefits, costs, and three-year impacts of a welfare-to-work program.* New York: Manpower Demonstration Research Corporation.

Robins, Philip K. 1986. "Child Support, Welfare Dependency, and Poverty." *American Economic Review* 76(4): 768-788.

Ruggles, Patricia, Steve Bartolomei-Hill, Richard Silva, and Gil Crouse. 1998. *Aid to Families with Dependent Children: The Baseline*. Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. http://aspe.hhs.gov/hsp/AFDC/afdcbase98.htm Schmidt, Lucie and Purvi Sevak. 2004. "AFDC, SSI, and Welfare Reform Aggressiveness: Caseload Reductions vs. Caseload Shifting." *Journal of Human Resources* 39(3): 792-812.

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

Schott, Liz, LaDonna Pavetti, and Ife Finch. 2012. "How State have Spent Federal and State Funds under the TANF Block Grant." Center on Budget and Policy Priorities, Washington, DC.

Schram, Sanford F., Joe Soss, Richard C. Fording, and Linda Houser. 2009. "Deciding to Discipline: Race, Choice, and Punishment at the Frontlines of Welfare Reform." *American Sociological Review* 74(2): 398-422.

Shaefer, H. Luke, and Kathryn Edin. 2013. "Rising Extreme Poverty in the United States and the Response of Federal Means-Tested Transfer Programs." *Social Service Review* 87(2): 250-268.

Shaw, Kathryn. 1989. "Life-Cycle Labor Supply with Human Capital Accumulation." *International Economic Review* 30(2): 431-456.

Smith, Jeffrey, and Petra Todd. 2005. "Does Matching Overcome LaLonde's Critique of Nonexperimental Estimators?" *Journal of Econometrics* 125:305–53.

Skocpol, Theda. 1992. Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States, Harvard University Press.

Soss, Joe, Sanford F. Schram, Thomas P. Vartanian, and Erin O'Brien. 2001. "Setting the Terms of Relief: Explaining State Policy Choices in the Devolution Revolution." *American Journal of Political Science* 45(2):378–95.

Sullivan, James X. 2006. "Welfare Reform, Saving, and Vehicle Ownership: Do Asset Limits and Vehicle Exemptions Matter?" *Journal of Human Resources*, 41: 72-105.

Sullivan, James, Lesley Turner and Sheldon Danziger. 2008. "The Relationship Between Income and Material Hardship." *Journal of Policy Analysis and Management* 27(1): 63-81.

Swann, Christopher. 2005. "Welfare Reform When Recipients are Forward-Looking." *Journal of Human Resources* 40(1): 31-56.

Tekin, Erdal. 2007. "Child care subsidies, wages, and the employment of single mothers." *Journal of Human Resources*, 42, 453–487.

Teitler, Julien, Nancy Reichman, Lenna Nepomnyaschy, and Irwin Garfinkel. 2009. "Effects of Welfare Participation on Marriage." *Journal of Marriage and Family* 71(4): 878-891.

Turner, Lesley, Sheldon Danziger and Kristin Seefeldt. 2006. "Failing the Transition from Welfare to Work: Women Chronically Disconnected from Work and Cash Welfare," *Social Science Quarterly* 87(2): 227-249.

United States Department of Labor. 1965. *The Negro Family: The Case for National Action*. Office of Policy Planning and Research, Washington, DC.

Waite, Linda. 1995. "Does Marriage Matter?" Demography 32(4): 483-507.

Waldfogel, Jane. 2007. "Welfare Reforms and Child Well-Being in the US and the UK." *Swedish Economic Policy Review* 14(2): 137-168.

Weiss, Yoram. 1972. "On the Optimal Pattern of Labor Supply." *Economic Journal* 82(2): 1292-1315.

Wu, Chi-Fang, Maria Cancian, Daniel R. Meyer, and Geoffrey L. Wallace. 2006. "How Do Welfare Sanctions Work?" *Social Work Research*, 30: 33-50.

Ziliak, James P. 2002. "Social Policy and the Macroeconomy: What drives welfare caseloads?" *Focus* 22(1): 29-34.

Ziliak, James P. 2003. "Income Transfers and Assets of the Poor," *Review of Economics and Statistics* 85(1): 63–76.

Ziliak, James P. 2007. "Making Work Pay: Changes in Effective Tax Rates and Guarantees in U.S. Transfer Programs, 1983–2002," *Journal of Human Resources*, 42(3): 619–642.

Ziliak, James P. 2008. "Filling the Poverty Gap, Then and Now." In *Frontiers of Family Economics* Vol. 1, Peter Rupert (ed.), Emerald Publishing Group, 39-114.

Ziliak, James P. 2014. "Supporting Low-Income Workers Through Refundable Child-Care Credits." In *Policies to Address Poverty in America*, Melissa Kearney and Benjamin Harris (eds.), The Hamilton Project: Brookings Institution, 109-118.

Ziliak, James P. 2015. "Income, Program Participation, Poverty, and Financial Vulnerability: Research and Data Needs." *Journal of Economic and Social Measurement* 40(1-4): 27-68.

Ziliak, James P., Craig Gundersen, and David Figlio. 2003. "Food Stamp Caseloads Over the Business Cycle," *Southern Economic Journal* 69(4): 903–919.

Ziliak, James P., David Figlio, Elizabeth Davis, and Laura Connolly. 2000. "Accounting for the Decline in AFDC Caseloads: Welfare Reform or the Economy?," *Journal of Human Resources* 35(3): 570–586.

Ziliak, James P., and Thomas J. Kniesner. 1999. "Estimating Life-Cycle Labor Supply Tax Effects," *Journal of Political Economy* 107(2): 326–359.

Ziliak, Stephen T. 2004. "Self-Reliance Before the Welfare State: Evidence from the Charity Organization Movement in the United States," *Journal of Economic History* 64(2): 433-461.

Ziliak, Stephen T., and Joan Underhill Hannon. 2006. "Public Assistance: Colonial Times to the 1920s," in *Historical Statistics of the United States: Colonial Times to the Present*, Millennial Edition On Line, Susan B. Carter, et al. (eds.), Cambridge University Press, pp. 693-700.

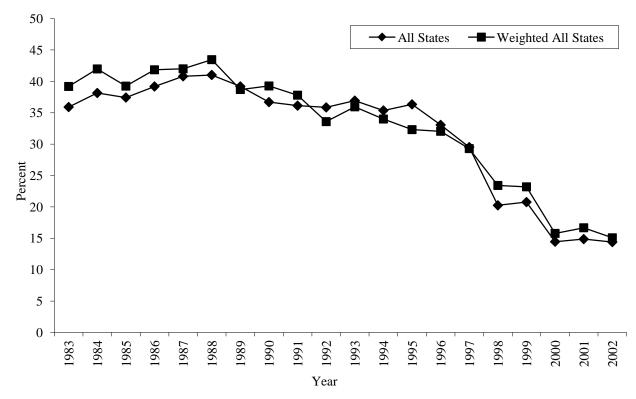


Figure 1. Effective AFDC/TANF Earned Income Tax Rates, 1983-2002

Source: Ziliak (2007).

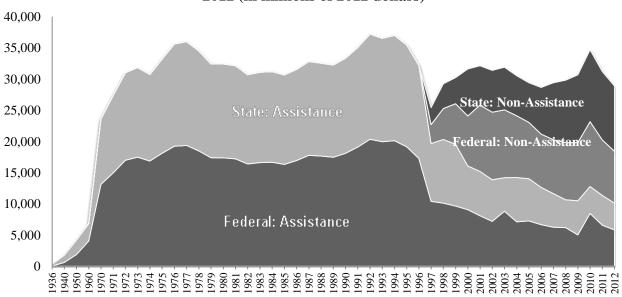
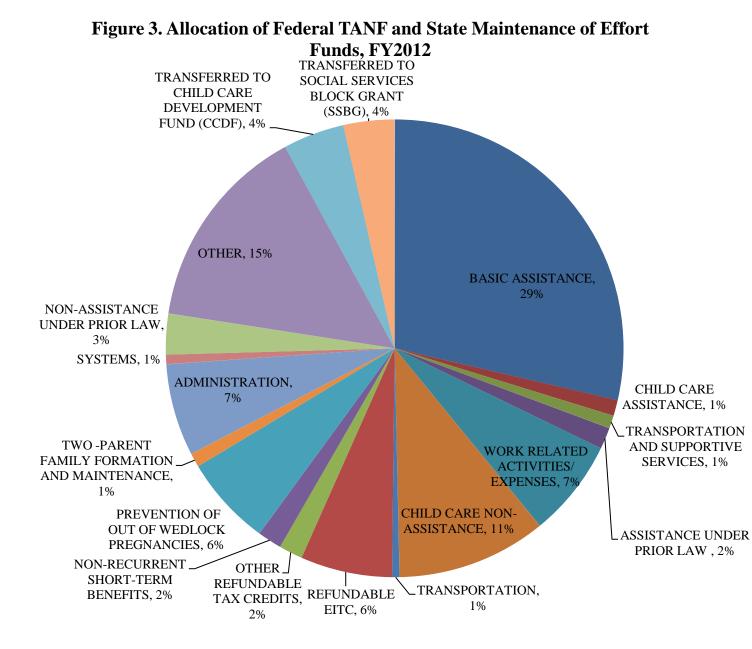


Figure 2. AFDC/TANF Expenditures by Level and Category, FY 1936-2012 (in millions of 2012 dollars)

Year



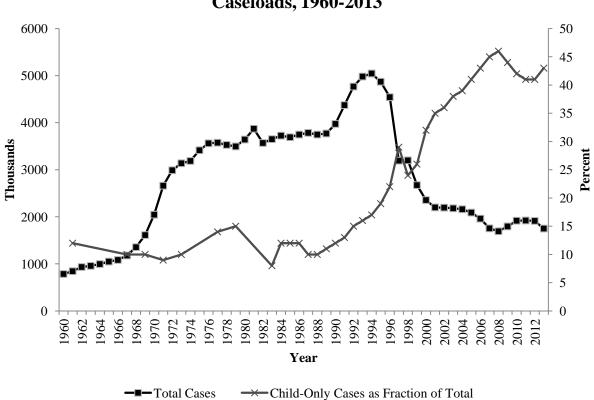


Figure 4a. Trends in Total and Child-Only AFDC/TANF Caseloads, 1960-2013

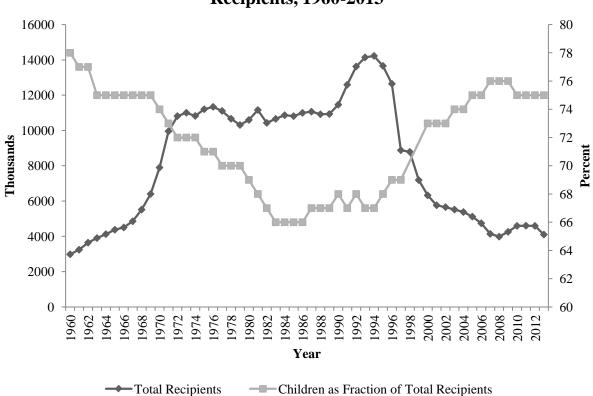
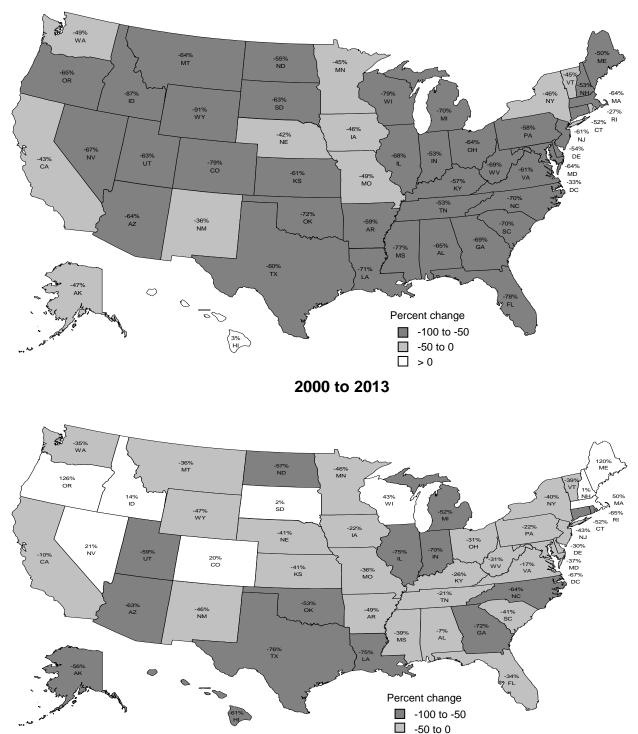


Figure 4b. Trends in Total and Child AFDC/TANF Recipients, 1960-2013

Figure 5. Change in AFDC/TANF Caseloads by State

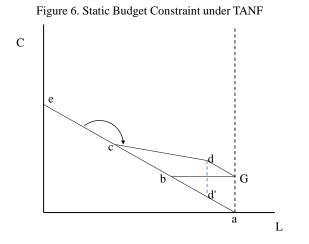


1993 to 2000

Sources: University of Kentucky Center for Poverty Research <http://www.ukcpr.org/AvailableData.aspx>; caseload figures are population adjusted.

 $\square > 0$

(For original data, see "TANF_map_data_UKCPR_ACF-OFA.xlsx".)



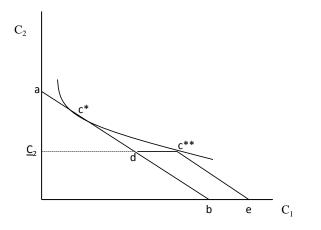


Figure 7. Effect of Consumption Floor and Asset Tests on Intertemporal Consumption

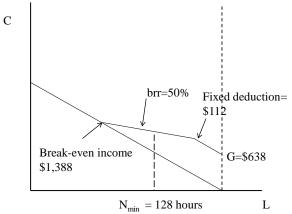


Figure 8. Work Requirements under TANF for Single Mother with 2 Kids In California as of 2012

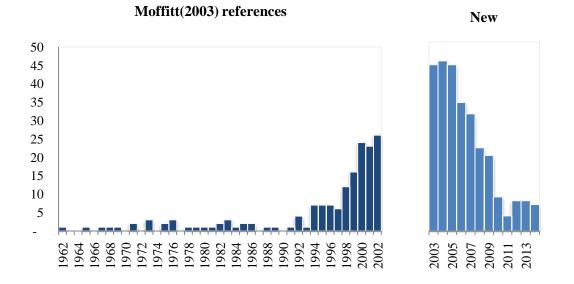


Figure 9. AFDC/TANF Book and Journal Citations by Year

Date	Title of Legislation	Main Provisions
August 22, 1996	Personal Responsibility and Work Opportunity Reconciliation Act	Established the block grant of Temporary Assistance for Needy Families. Appropriated funds for the block grant through FY2002.
August 5, 1997	Balanced Budget Act of 1997	Raised the cap limiting the counting of vocational educational training and teen parents engaged in education from 20 percent of those considered engaged in work to 30 percent of those considered engaged in work, and temporarily removed from that cap teen parents through FY1999; set the maximum allowable TANF transfer to Title XX social services at 10 percent of the block grant (rather than one-third of total transfers); and made technical corrections to P.L. 104-193. P.L. 105-33 also established the \$3 billion over two-years (FY1998 and FY1999) Welfare-to-Work (WTW) grant program within TANF, but administered by the Department of Labor at the Federal level, with local administration by State workforce investment boards and competitive grantees.
November 19, 1997	Adoption and Safe Families Act	Reduced the contingency fund appropriation by \$40 million.
June 9, 1998	Transportation Act for the 21st Century	Permitted the use of Federal TANF funds to be used as matching funds for reverse commuter grants.
November 29, 1999	Consolidated Appropriations Act for 2000	Broadened eligibility for recipients to be served by the WTW grant program and added limited authority for vocational educational or job training to be WTW activities.
	Consolidated Appropriations Act for 2001	Gave grantees two more years to spend WTW grant funds (a total of five years from the date of the grant award).
March 9, 2002	Job Creation and Worker Assistance Act	Extended supplemental grants and contingency funds, both of which had expired on September 30, 2001, through FY2002. (Supplemental grants were extended at FY2001 levels).
February 8, 2006	Deficit Reduction Act of 2005	Extended most TANF grants through FY2010 (supplemental grants expire at the end of FY2008); eliminated TANF bonus funds; established competitive grants within TANF for healthy marriage and responsible fatherhood initiatives; revised the caseload reduction credit; and required HHS to issue regulations to develop definitions for the statutory activities that count toward the TANF work participation standards as well as verify work and participation in activities.

 Table 1. Major Legislation Regarding the TANF Program, 1996-September 2012

February 17, 2009	American Recovery and Reinvestment Act	Established a \$5 billion Emergency Contingency Fund (ECF) to reimburse states for increased costs associated with the 2007-9 recession for FY2009 and FY2010. The fund reimbursed states, territories, and tribes for 80 percent of the increased costs of basic assistance, non-recurrent short-term benefits, and subsidized employment. The law also permitted states to "freeze" caseload reduction credits at pre-recession levels, allowed states to use TANF reserve funds for any benefit or service (before it was restricted to assistance), and extended supplemental grants through the end of FY2010.
December 8, 2010	Claims Resolution Act of 2010	Extended basic TANF funding through the end of FY2011, September 30, 2011, but reduced funding for the contingency fund and provided supplemental grants only through June 30, 2011. Also required some additional reporting on work activities and TANF expenditures.
September 30, 2011	Short-Term TANF Extension Act	Extended basic TANF funding for three months, through December 31, 2011. No funding was provided for supplemental grants.
December 23, 2011	Temporary Payroll Tax Cut Continuation Act of 2011	Extended basic TANF funding for two months through February 29, 2012.
February 22, 2012	Middle Class Tax Relief and Job Creation Act of 2012	Extended basic TANF funding for the remainder of FY2012 (to September 30, 2012). It also prevented electronic benefit transaction access to TANF cash at liquor stores, casinos, and strip clubs; states would be required to prohibit access to TANF cash at Automated Teller Machines (ATMs) at such establishments. It also required states to report TANF data in a manner that facilitates the exchange of that data with other programs' data systems.

Notes: Addition, but un-named legislation includes

P.L. 107-229 extended TANF basic grants, supplemental grants, bonus funds, contingency funds, and other related programs through December 20, 2002. Signed into law September 30, 2002. Other "temporary extensions" of TANF grants were made in: P.L. 107-294, through March 30, 2003 (November 22, 2002); P.L. 108-7, through June 30, 2003 (February 20, 2003); P.L. 108-40, through September 30, 2003 (June 30, 2003); P.L. 108-89, through March 31, 2004 (October 1, 2003); P.L. 108-210, through June 30, 2004 (March 31, 2004); P.L. 108-262, through September 30, 2004 (June 30, 2004); P.L. 108-308, through March 31, 2005 (September 30, 2004); P.L. 109-4, through June 30, 2005 (March 25, 2005); and P.L. 109-19, through September 30, 2005 (July 1, 2005).

P.L. 108-199 rescinded all remaining unspent WTW formula grant funds, effectively ending the WTW grant program. Signed into law January 23, 2004.

P.L. 109-68 provided extra funding to help States provide benefits to families affected by Hurricane Katrina, allowing States to draw upon contingency funds to assist those displaced by the hurricane; allowing directly affected States to receive funds from the loan fund, with repayment of the loan forgiven; and suspending penalties for failure to meet certain requirements for States directly affected by the hurricane. Also, temporarily extended TANF grants through December 30, 2005. Signed into law September 21, 2005.

P.L. 109-161 extended TANF grants through March 30, 2006. Signed into law December 30, 2005.

P.L. 110-275 included an extension of TANF supplemental grants through the end of FY2009. Signed into law July 15, 2008.

P.L. 111-242, the first continuing appropriations resolution for FY2011, extended TANF funding through December 3, 2010. Signed into law September 30, 2010. P.L. 111-290, the second continuing resolution, continued TANF funding authority through December 18, 2010. Signed into law December 4, 2010.

P.L. 112-175, the Continuing Appropriations Resolution, 2013 extended TANF funding through March, 2013 at FY2012 levels. Signed into law September 28, 2012.

Date	AFDC	TANF 2000	TANF 2013
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	
Time limits	None	Federal funds cannot be used for payments to adults for more than 60 months lifetime (20 percent of caseload exempt)	
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 hours/week for single mothers or 20 hours/week with children under 6; 55 hours/week for two-parent families with federally- funded child care or 35 hours/week with no child

Table 2. Comparison of AFDC, TANF 2000, and TANF 2013

		30/week for single mothers	care. Supplemental educational activities can make up 10 hours/week for single mothers without children under 6 or 5 hours/week for two-parent families; vocational education training (12-month lifetime limit) and community service (structured programs meeting certain criteria) are considered core activities
Work requirement participation requirements	JOBS participation requirements	Participation for work requirements rise to 50% by FY 2002	Participation rates adjusted downward based on caseload declines since 2005 instead of 1995; applicable caseloads include SSP-MOE
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 attendance, 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)

Moffitt (2003) source: Burke, V. 1996. New welfare law: Comparison of the New Block Grant Program with Aid to Families with Dependent Children. Report no. 96-720EPW. Washington, D.C.: Congressional Research Service.See "New welfare law. Comparison of the new block grant program with AFDC (Burke, CRS 1997).pdf"

State	Family cap ^B	Liquid asset limit ^C	Vehicle asset test ^C	Diversion payment amount ^D
Alabama	No	None	All	None
Alaska	No	$2000/3000^{1}$	All	3 months
Arizona	Yes	2000	All	3 months
Arkansas	Yes	3000	One	3 months
California	Yes	$2000/3000^{1}$	4650 ^F /driver	Varies
Colorado	No	None	All	Varies
Connecticut	Yes	3000	9500^{E}	3 months
Delaware	Yes	10000	All	\$1500
D.C.	No	$2000/3000^{1}$	All	3 months
Florida	Yes	2000	8500^{E}	Varies
Georgia	Yes	1000	1500/4650 ^E	None
Hawaii	No	5000	All	None
ldaho	No	5000	One	3 months
Illinois	No	2000/3000/+50	One	None*
Indiana	Yes	1000/1500 ^R	5000^{E}	None
lowa	No	2000/5000 ^R	One	None
Kansas	No	2000	All	\$1000
Kentucky	No	2000	All	\$1300
Louisiana	No	None	All	None
Maine	No	2000	One	3 months
Maryland	No	None	All	3 months
Massachusetts	Yes	2500	$10000^{\rm F}/5000^{\rm E}$	None
Michigan	No	3000	All	3 months
Minnesota	Yes	2000/5000 ^R	15000^{F}	Varies
Mississippi	Yes	2000	All	None
Missouri	No	1000/5000 ^R	One	None
Montana	No	3000	One	None
Nebraska	No	4000/6000	One	None
Nevada	No	2000	One	Varies
New Hampshire	No	1000/2000 ^R	One/driver	None
New Jersey	Yes	2000	All^F	\$1550
New Mexico	No	3500	All	\$2500
New York	No	$2000/3000^{1}$	4650 ^F /9300 ^F	Varies
North Carolina	Yes	3000	All	3 months
North Dakota	Yes	3000/6000/+25	One	\$1720
Ohio	No	None	All	None
Oklahoma	No	1000	5000^{E}	None
Oregon	No	2500	10000^{E}	None
Pennsylvania	No	1000	One	3 months

 Table 3. State Policy Choices in the TANF Program as of 2012

Rhode Island	No	1000	One/adult	None
South Carolina	Yes	2500	One/driver	None
South Dakota	No	2000	One	2 months
Tennessee	Yes	2000	4600^{E}	\$1200
Texas	No	1000	$4650 \text{ of all}^{\mathrm{F}}$	\$1000
Utah	No	2000	All	3 months
Vermont	No	2000	One/adult	4 months
Virginia	Yes	None	All	4 months
Washington	No	1000	5000^{E}	\$1250
West Virginia	No	2000	One	3 months
Wisconsin	No	2500	10000^{E}	\$1600
Wyoming	No	2500	One	None

Source: Welfare Rules Databook (2014).

^A WRD (2014). Table L5 Maximum Monthly Benefit for a Family of Three with No Income, 1996-2012 (July).

^B WRD (2014). Table IV.B.1 Family Cap Policies, July 2012.

^C WRD (2014). Table I.C.1 Asset Limits for Applicants, July 2012; Table IV.A.3 Asset Limits for Recipients, July 2012. Note: vehicle asset may be equity value or fair-market value depending on state.

^D WRD (2014). Table I.A.1 Formal Diversion Payments, July 2012.

^E Equity value of the vehicle.

^F Fair-market value of the vehicle.

Note: Many states have separate policies regarding different types of vehicles, such as income-producing vehicles, recreational vehicles, and vehicles that are used as homes. See the Welfare Rules Database for more information on these policies.

1 Units including an elderly person may exempt \$3,000; all other units exempt \$2,000.

Suggested citation: Kassabian, David, Erika Huber, Elissa Cohen, and Linda Giannarelli (2013). Welfare Rules Databook: State TANF Policies as of July 2012, OPRE Report 2013-27, Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

(For original tables, see "Welfare rules databook. State TANF policies as of July 2012.pdf".)

* Note: Illinois diversion payments.

WRD (2014) indicates Illinois has a diversion payment program but lacks information on the maximum amount, how often one can receive it, or period of ineligibility after payment; it only indicates "Yes" for program, "Cash" for form of payment, and "No" for payment counts toward time limit. Footnote 17: "An applicant who has found a job that will make him or her ineligible for cash assistance, or who wants to accept a job and withdraw his or her application for assistance, is eligible for a one-time payment to begin or maintain employment."

<http://www.cfs.purdue.edu/cff/documents/family_data/abt_associates_repor.pdf> indicates no diversion program.

http://www.acf.hhs.gov/programs/ofa/resource/tanf-financial-data-fy-2012> shows Illinois has no expenditures for non-recurring benefits in 2012, but it did in 2005, 2010, 2011.

Stat	es	Lifetime Limits
34:	AK, AL, CO, HI, IA, IL, KY, LA, MD*, ME, MN, MO, MS, MT, NC, ND, NE, NH, NJ, NM, NV, OH ¹ , OK, OR*, PA, SC, SD, TN, TX*, VA, WA, WI, WV, WY	60 months
6:	CA*, FL, GA, KS, MI, RI	48 months
2:	DE, UT	36 months
4:	AR, AZ, ID, IN*	24 months
1:	СТ	21 months
4:	DC ² , MA, NY, VT	Unlimited; state-sponsored after 60 months
		Intermittent Limits
3:	LA, MA, RI	24 of 60 months
1:	SC	12 of 120 months
1:	NV	24 months; followed by 12 months of ineligibility
1:	VA	24 months; followed by 24 months of ineligibility
1:	NC	24 months; followed by 36 months of ineligibility
1:	ОН	36 months; followed by 24 months of ineligibility
1:	TX*	12/24/36 months; followed by 60 months of ineligibility

 Table 4. State Lifetime TANF Limits, July 2012

Source: Welfare Rules Databook: State TANF Policies as of July 2012, OPRE Report 2013-27, published November 2013 (Urban Institute), Table IV.C.1 State Lifetime Time Limit Policies, July 2012.

Suggested citation: Kassabian, David, Erika Huber, Elissa Cohen, and Linda Giannarelli (2013). Welfare Rules Databook: State TANF Policies as of July 2012, OPRE Report 2013-27, Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

(For original table, see p166-167 of "Welfare rules databook. State TANF policies as of July 2012.pdf".)

* Only adult benefits are terminated; otherwise, benefits are terminated for the entire unit.

1 After receiving 36 months of assistance, the case is closed; however, it is possible to receive 24 additional months of benefits if the unit has not received benefits for at least 24 months and can demonstrate good cause for reapplying.

2 After 60 months, the unit remains eligible if the net income falls below the Reduced Payment Level. Benefits are reduced to 80 percent of the payment level for the unit size.

Table 5. AFDC/TANF Maximum Benefit for a 5-Person Family by State, 1970-2012										
	Jul-	Jul-	Jul-	Jul-	Jan-	Jan-	Jul-	Jul-	Percent	
	70\1	75	80	85	90\2	95\2	01\2	12\2	Change\3	
Alabama	\$65	\$108	\$118	\$118	\$118	\$164	\$164	\$215	-30	
Alaska	328	350	457	719	846	923	923	923	-41	
Arizona	138	163	202	233	293	347	347	278	-58	
Arkansas	89	125	161	192	204	204	204	204	-52	
California	186	293	473	587	694	607	645	638	-28	
Colorado	193	217	290	346	356	356	356	462	-50	
Connecticut	283	346	475	569	649	680	543	576	-57	
Delaware	160	221	266	287	333	338	338	338	-56	
District of Columbia	195	243	286	327	409	420	379	428	-54	
Florida	114	144	195	240	294	303	303	303	-44	
Georgia	107	123	164	223	273	280	280	280	-45	
Hawaii	226	428	468	468	602	712	570	610	-43	
Idaho	211	300	323	304	317	317	293	309	-69	
Illinois	232	261	288	341	367	367	377	432	-61	
Indiana	120	201		256	288		288	432 288	-01 -49	
			255			288				
Iowa	201	294	360	360	410	426	426	426	-55	
Kansas	222	321	345	391	409	429	429	429	-59	
Kentucky	147	185	188	197	228	228	262	262	-62	
Louisiana	88	128	152	190	190	190	240	240	-43	
Maine	135	176	280	370	453	418	461	485	-24	
Maryland	162	200	270	329	396	366	439	574	-25	
Massachusetts	268	259	379	432	539	579	618	618	-51	
Michigan (Wayne County)	219	333	425	417	516	459	459	492	-53	
Minnesota	256	330	417	528	532	532	532	532	-56	
Mississippi	56	48	96	96	120	120	170	170	-36	
Missouri	104	120	248	274	289	292	292	292	-41	
Montana	202	201	259	354	359	401	494	504	-47	
Nebraska	171	210	310	350	364	364	364	364	-55	
Nevada	121	195	262	285	330	348	348	383	-33	
New Hampshire	262	308	346	389	506	550	600	675	-46	
New Jersey	302	310	360	404	424	424	424	424	-70	
New Mexico	149	169	220	258	264	357	389	380	-46	
New York	279	332	394	474	577	577	577	770	-42	
North Carolina	145	183	192	246	272	272	272	272	-60	
North Dakota	213	283	334	371	386	409	477	427	-58	
Ohio	161	204	263	290	334	341	373	450	-41	
Oklahoma	152	217	282	282	325	324	292	292	-60	
Oregon	184	337	282	386	432	460	503	506	-42	
Pennsylvania	265	296	332	364	421	421	403	403	-68	
Rhode Island	229	278	340	409	543	554	554	554	-49	
South Carolina	85	<u>96</u>	129	187	206	200	203	216	-46	
South Dakota	264	289	321	329	377	417	430	555	-56	
Tennessee	112	115	122	153	184	185	185	185	-65	
Texas	148	115	116	167	184	185	201	263	-63	
Utah	148	252	360	376	387	414	474	203 498	-40	
C tuni	175	232	500	570	507	714	7/4	770		

 Table 5. AFDC/TANF Maximum Benefit for a 3-Person Family by State, 1970-2012

Vermont	267	322	492	583	662	638	629	640	-50
Virginia	225	268	310	354	354	354	320	320	-70
Washington	258	315	458	476	501	546	546	478	-61
West Virginia	114	206	206	249	249	249	453	340	-37
Wisconsin	184	342	444	533	517	517	628	608	-30
Wyoming	213	235	315	360	360	360	340	602	-40
Median State	232	279	321	401	539	645	389	427	-51

Source: For 1970-1995 Green Book (1998), Table 7-14; For 2001 and 2012: Welfare Rules Databook: State TANF Policies as of July 2012, OPRE Report 2013-27, published November 2013 (Urban Institute), Table L5 Maximum Monthly Benefit for a Family of Three with No Income, 1996-2012 (July).

\1\ Data on three-person families were not published or reported before 1975. Thus, the 1970 data were derived by reducing the reported four-person need standard by the proportional difference between three- and four-person AFDC need standards as shown in the July 1975 DHEW reports.

2 CRS survey data.

\3\ Real percentage change, calculated assuming a 2012 PCE value of 106.01 relative to the 1970 value of 22.325.

State	Flat Disregard (\$)	Percent of Remainder	Months applicable
Alabama	0	100	1-12
	0	20	>121
Alaska	150	33	1-12
	150	25	13-24
	150	20	25-36
	150	15	37-48
	150	10	49-60
	150	0	>60
Arizona—All, except JOBSTART	90	30	All
Arizona—JOBSTART	0	100	All^3
Arkansas	No disregards; flat		All
	grant amount		
California	112	50	All
Colorado	0	66.7	1-12
	120	33.3	13-16
	120	0	17-24
	90	0	>24
Connecticut	0	100 up to FPL	All
Delaware	120	33.3	1-4
	120	0	5-12
	90	0	>12
D.C.	160	66.7	All
Florida	200	50	All
Georgia	120	33.3	1-4
	120	0	5-12
	90	0	>12
Hawaii	20%, \$200	55	1-24
	20%, \$200	36	>24
Idaho	0	40	All
Illinois	0	75	All
Indiana	0	75	All
Iowa	20%	58	All
Kansas	90	60	All
Kentucky	0	100	$1-2^4$
	120	33.3	3-6
	120	0	7-14
	90	0	>14
Louisiana	1020	0	1-6 ⁵
	120	0	>6

 Table 6. Monthly Benefit Earnings Disregards in TANF, July 2012

Maine	108	50	All
Maryland	0	40	All
Massachusetts—	120	50	All
Nonexempt			
Massachusetts—Exempt	120	33.3	All
Michigan	200	20	All ⁶
Minnesota	0	38	All
Mississippi	0	100	1-6
	90	0	>6
Missouri	90	66.7	1-12
	90	0	>12
Montana	200	25	All
Nebraska	0	20	All
Nevada	0	100	1-3
	0	85	4-6
	0	75	7-9
	0	65	10-12
	max(\$90, 20%)	0	>12
New Hampshire	0	50	All
New Jersey	0	100	1
	0	75	2-7
	0	50^{10}	>7
New Mexico	125	50	All^{12}
New York	90	50	All
North Carolina	0	100	1-3 ¹³
	0	27.5	>3
North Dakota	max(\$180, 27%)	50	1-6
	max(\$180, 27%)	35	7-9
	max(\$180, 27%)	25	10-13
	max(\$180, 27%)	0	>13
Ohio	250	50	All
Oklahoma	240	50	All^{15}
Oregon	0	50	All
Pennsylvania	0	50	All
Rhode Island	170	50	All
South Carolina	0	50	$1-4^{16}$
	100	0	>4
South Dakota	90	20	All
Tennessee	250	0	All ¹⁸
Texas	120	90 (up to \$1400)	4 out of 12 months ²⁰
** 1	120	0	>4 out of 12^{20}
Utah	100	50	All
Vermont	200	25	All^{21}
Virginia	147	20	All ²³

Washington	0	50	All
West Virginia	0	40	All
Wisconsin	No disregards; flat		All
	grant amount.		
Wyoming	200	0	All ²⁴

Source: Welfare Rules Databook: State TANF Policies as of July 2012, OPRE Report 2013-27, published November 2013 (Urban Institute), Table L4. Earned Income Disregards for Benefit Computation, 1996-2012 (July) or Table II.A.1. Earned Income Disregards for Benefit Computation, July 2012, or Table II.A.2 Benefit Determination Policies, July 2012.

Suggested citation: Kassabian, David, Erika Huber, Elissa Cohen, and Linda Giannarelli (2013). Welfare Rules Databook: State TANF Policies as of July 2012, OPRE Report 2013-27, Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Earnings Disregards Notes:

The table describes benefit computation disregards for recipients. If the disregards differ for applicants, it is footnoted.

1 The earned income disregard cannot be applied to the earnings of an individual receiving assistance beyond the 60th month under an exemption or extension.

2 These disregards also apply to applicants who have received assistance in one of the previous four months.

3 In addition to the 100 percent disregard of all subsidized JOBSTART wages, recipients can disregard the standard \$90 and 30 percent of the remainder for any non-JOBSTART earned income.

4 Recipients are eligible for the one-time 100 percent disregard if they become newly employed or report increased wages acquired after approval.

5 The six months in which the extra \$900 is disregarded need not be consecutive, but the recipient may use this extra disregard in no more than six months over the course of his or her lifetime.

6 At application to determine initial eligibility, 20 percent disregard is used. Once determined eligible and for ongoing benefits, a 50 percent disregard is used for benefit computation.

7 Recipients are eligible for the one-time 100 percent disregard if they find employment of 35 hours a week within the first 30 days of their initial approval for TANF. If work is not found within 30 days, the recipient is ineligible to ever receive the disregard again. An additional 100 percent disregard is available to units for three months when the unit's case is subject to closure because of increased earnings and the individual is employed for at least 25 hours a week at the federal minimum wage or higher. The recipient may not have already received the six-month disregard, unless there has been at least a 12-month break in receipt of TANF benefits. The three-month disregard may be received more than once during the 60-month TANF benefit period provided there is a period of at least 12 consecutive months in which a family does not receive TANF benefits before the family reapplies for assistance. Two-parent units may disregard 100 percent of earnings for the first six months, \$120 and 33.3 percent in the next 12 months, and \$90 thereafter. If a recipient marries for the first time, his or her new spouse may receive a one-time, 100 percent disregard for six consecutive months.

8 This policy applies only to recipients who become employed while receiving TANF. Applicants and recipients who gained employment before receiving TANF are allowed to disregard \$120 and 33.3 percent of remainder for first four months, \$120 next eight months, \$90 thereafter.

9 The 100 percent disregard is applicable only once every 12 months, even if employment is lost and then regained. In the first month of benefit computation, applicants may disregard 50 percent of earnings only.

10 These disregards apply to individuals working 20 or more hours a week. Individuals employed fewer than 20 hours a week may disregard 100 percent in the first month of employment and 50 percent thereafter. However, if an individual's hours increase to 20 hours during the first six months, he or she may disregard 75 percent for the

remainder of the six-month period. The 100 percent disregard is only applicable once every 12 months, even if employment is lost and then regained.

11 Two-parent units may disregard all earnings in excess of 35 hours a week for one parent and 24 hours a week for the other parent, \$225, and 50 percent in the first 24 months. Thereafter, they may disregard \$225 and 50 percent of the remainder. The disregard for earnings in excess of the participation requirement only applies to recipients for the first 24 months of benefit receipt, for both single and two-parent units.

12 Two-parent units may disregard \$225 and 50 percent of the remainder.

13 The 100 percent disregard is available only once in a lifetime and may be received only if the recipient is newly employed at a job that is expected to be permanent for more than 20 hours a week.

14 (NOTE: The full entry for North Dakota includes extra disclaimers before the actual footnote. "\$180 or 27% (whichever is greater) and 50% of remainder unless the household has already received the 50% disregard for six months during a previous TANF eligibility period14") FOOTNOTE: If a parent marries while receiving assistance, the income of his or her new spouse is disregarded for the first six months. The disregard for the new spouse only applies if his or her needs were not previously included in the unit.

15 These disregards apply to individuals working full time, defined as 20 hours a week for recipients caring for a child under age 6 and 30 hours a week for all other recipients. Individuals working less than full time may disregard \$120 and 50 percent of the remainder.

16 The 50 percent disregard is available only once in a lifetime and may only be applied to consecutive months. 17 If a parent marries while receiving assistance, and the new spouse's gross income (minus any court-ordered child support) is less than 185 percent of the consolidated need standard for the entire assistance unit including the spouse, the unit may choose to include the new spouse in the unit. If the spouse is included, all his or her income is excluded for eligibility purposes and benefit computation. If he or she is not in the unit, all the spouse's income and resources are excluded for eligibility and benefit computation.

18 If a parent marries while receiving assistance, the unit may choose to exclude the new spouse from the unit for three months. At the end of the three-month period, however, the new spouse becomes a mandatory member of the assistance unit, and his or her income is counted in benefit computation calculations.

19 Once the recipient has received four months (they need not be consecutive) of the 90 percent disregard, he or she is not eligible to receive the disregard again until the TANF case has been denied and remains denied for one full month, and 12 calendar months have passed since the denial. The 12-month ineligibility period begins with the first full month of denial after the client used the fourth month of the 90 percent disregard.

20 Once the recipient has received four months (they need not be consecutive) of the 90 percent disregard, he or she is not eligible to receive the disregard again until the TANF case has been denied and remains denied for one full month, and 12 calendar months have passed since the denial. The 12-month ineligibility period begins with the first full month of denial after the client used the fourth month of the 90 percent disregard. The earnings of a TANF recipient's new spouse are disregarded for six months if the total gross income of the budget group does not exceed 200 percent of the federal poverty level.

21 These disregards apply to recipients with income from unsubsidized employment or a combination of subsidized and unsubsidized employment. For recipients with earnings from subsidized employment only, the disregard is \$90. 22 The disregard varies by family size; for one to four family members, the disregard is \$134. For five members, the disregard is \$157; and for six or more family members, the disregard is \$179.

23 The disregard varies by family size; for one to three family members, the disregard is \$147. For four members, the disregard is \$155; for five members, the disregard is \$181; and for six or more family members, the disregard is \$208.

24 Married couples with a child in common may disregard \$400.

	1996	2000	2005	2010
Age of adult recipients, percent ^A				
Under 20	5.8	7.1	7.3	7.9
20-29	42.3	42.5	47.1	51.3
30-39	35.3	32.1	28.1	25.4
40-49	16.6*	14.7	14.2	12.1
Over 49		3.6	3.2	3.3
Percent adults ≥ 25 with less than HS education ^B	18.3	15.9	14.8	12.9
Other assistance ^C				
Living in public housing	8.8	17.7	18.4	13.1
Receiving SNAP or donated food	89.3	79.9	81.5	82.4
Employment status, percent of adults ^C				
Employed	11.1	26.4	23.2	22.3
Unemployed	-	49.2	50.4	46.8
Not in the labor force	-	24.3	26.4	30.9
Marital status, percent of adults ^C				
Single	-	65.3	68.8	70.0
Married	-	12.4	10.7	14.4
Separated	-	13.1	11.8	9.6
Widowed	-	0.7	0.6	0.5
Divorced	-	8.5	8.1	5.5
Family size ^C	2.8	2.6	2.4	2.4
Percent child-only families ^C	-	32.7	42.6	44.0
Percent whose youngest child is: ^D				
Ages 1-2	24.7	20.3	20.3	23.0
Under age 1	10.6	13.6	14.5	14.8

Table 7. Selected Characteristics of TANF families, 1996-2010

Source: USDHHS (2014) and Characteristics and Financial Circumstances of TANF Recipients (online).

^A USDHHS (2014). Table IND 3a. Number and Percentage of the Total Population Receiving AFDC/TANF by Age: 1970-2011.

^B USDHHS (2014). Table WORK 4. Percentage of Adults Ages 25 and over by Level of Educational Attainment: Selected Years.

^C USDHHS (2014). Table TANF 7. Characteristics of AFDC/TANF Families: Selected Years 1969 – 2011.

^D Administration for Children and Families, Office of Family Assistance, Characteristics and Financial Circumstances of TANF Recipients (data inflated by fraction of non-missing)

 (Date accessed: June 24, 2014).">http://archive.acf.hhs.gov/programs/ofa/character/> (Date accessed: June 24, 2014).

(http://archive.act.http://blograms/ora/character/>(Date accessed. June 24, 2014).

* Data in this year is only available for age groups 40-45 and >45, so this figure represents >=40. Suggested citations:

U.S. Department of Health and Human Services. 2014. Welfare Indicators and Risk Factors: Thirteenth Annual Report to Congress. Washington, D.C.: Office of the Assistance Secretary for Planning and Evaluation.

Administration for Children and Families, Office of Family Assistance, Characteristics and Financial Circumstances of TANF Recipients http://archive.acf.hhs.gov/programs/ofa/character/ (Date accessed: June 24, 2014). For original tables from the 13th Annual Report to Congress, see "13th TANF Report to Congress. Welfare indicators and risk factors (2014).pdf".

For original tables from AFC-OFA online, see url links below:

Table 11. AFDC Families by age of the youngest child in the assistance unit

<http://archive.acf.hhs.gov/programs/ofa/character/FY96/AX11.PDF>.

Table I-32. Temporary Assistance for Needy Families - Active Cases - Percent Distribution of TANF Youngest Child Recipient by Age Group, October 1999 - September 2000

<http://archive.acf.hhs.gov/programs/ofa/character/FY2000/132.htm>.

Table 34. Temporary Assistance for Needy Families - Active Cases - Percent Distribution of TANF Youngest Child Recipient by Age Group, October 2004 - September 2005

<http://archive.acf.hhs.gov/programs/ofa/character/FY2005/tab18.htm>.

Table 34. Temporary Assistance for Needy Families - Active Cases - Percent Distribution of TANF Youngest Child Recipient by Age FY2010 http://www.acf.hhs.gov/sites/default/files/ofa/appendix_ys_final.pdf.