Spring 2017

The Personal Responsibility and Work Opportunity and Reconciliation Act: Spending and Poverty

Emily Legel

University of Iowa

Follow this and additional works at: https://ir.uiowa.edu/honors_theses

Part of the Economic Policy Commons, Policy Design, Analysis, and Evaluation Commons, Political Economy Commons, Public Economics Commons, Social Policy Commons, and the Social Welfare Commons
THE PERSONAL RESPONSIBILITY AND WORK OPPORTUNITY AND RECONCILIATION ACT: SPENDING AND POVERTY

by

Emily Legel

A thesis submitted in partial fulfillment of the requirements for graduation with Honors in the Economics

David Frisvold
Thesis Mentor

Spring 2017

All requirements for graduation with Honors in the Economics have been completed.

Stacey Brook
Economics Honors Advisor

This honors thesis is available at Iowa Research Online: https://ir.uiowa.edu/honors_theses/
The Personal Responsibility and Work Opportunity and Reconciliation Act:

Spending and Poverty

Emily Legel

Submitted to the Department of Economics in fulfillment of Honors in the Undergraduate Major

The University of Iowa

April 26, 2017
Abstract

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) is the latest implementation of the welfare program. Different from Aid to Families with Dependent Children, the new law allows for spending in categories other than the cash assistance traditionally thought of as welfare. With the new program being administered as a block grant to the states, the levels of spending in each category vary not only by year but also by state. In this paper, I summarize PRWORA spending into seven categories. I will test for a correlation between levels of spending on benefits and other categories and changes in the official poverty measure. At the end, I find that spending on childcare assistance, work supports, and tax credits authorized under PRWORA have a moderate effect on a state's poverty rate in the short-term.
Introduction

The Census Bureau defines the Official Poverty threshold. Overall the threshold is defined by Consumer Price Index food allocation multiplied by three. A family is considered under the threshold if their income – work and capital gains – are below the set level, with two states, Alaska and Hawaii, receiving a higher threshold because of a higher overall cost of living. While the threshold differs by family size and composition as per the food allocation outlined above, state poverty rates are determined by the number of families that fail to meet the income levels for their respective types (Institute for Research on Poverty, Accessed 2017). In the United States, there are several programs designed to reduce poverty, including Social Security (a program designed to reduce poverty in seniors by giving them cash benefits), Supplemental Assistance to Needy Families (a program that gives food assistance), and Temporary Assistance to Needy Families (TANF), the defined benefit program designed to reduce poverty across all ages. The third program listed, TANF, and its parent act, The Personal Responsibility and Work Opportunity and Reconciliation Act [PRWORA], is the focus of this paper.

TANF is a program authorized under the law known formally as The Personal Responsibility and Work Opportunity and Reconciliation Act. Signed into law on August 22, 1996, PRWORA replaced the Aid for Families with Dependent Children [AFDC] program that was originally signed into law in 1935 as part of the Social Security Act. The original AFDC program focused primarily on giving cash assistance to needy families, widows and orphans, and eventually transitioned to providing some childcare assistance to all families. However, the basic principal remained, and it was not until the new act when spending was shifted to categories not typically thought of as welfare (HHS, Accessed 2017).
With the 1996 Personal Responsibility and Work Opportunity and Reconciliation Act turning twenty this past year, it is time to evaluate not only the effect of a shift in in program requirements but also a shift in spending away from traditional cash assistance that American Public Media's Marketplace (a public radio show) reported this summer in collaboration with the left-leaning center for American Progress (Clark, Esch, and Delvac 2016). While under Aid For Families with Dependent Children [AFDC] federal and state allocations were reserved for only for benefits (short-term, emergency as well as long-term cash assistance in addition to child care support), the new law allows for spending in any category as outlined below, resulting in a large shift in percentage allocations from the traditionally-thought of cash benefits and work supports (including childcare) towards other programs aimed at reducing poverty at the cause over the past 20 years. According to annual spending reports from the Department of Health and Human Services which administers the program, in 2015, block grant allocations authorized under PRWORA were spent on everything from childcare and transportation support programs to family reunification and Head Start, with additional transfers to state social service block grants and child care and development discretionary funds (Department of Health and Human Services 2015).

This paper hypothesizes that the differing ways states spend the money received from the federal government has a noticeable effect on poverty rates within each state. (Which direction the categories push the poverty rate I chose not to speculate). The rest of this article seeks to answer the question of which, if any, ways the official poverty measure is pushed.

**TANF Goals**

While the overall goal of the Temporary Assistance for Needy Families Program is to reduce poverty, the official goals are stated otherwise. Rather than being a defined benefit
program like AFDC, PRWORA is administered as a block grant to the states. This allows for shifts in spending from the prior-authorized benefits such as the defined benefits plan and childcare subsidies to other categories in accordance with the new priorities (defined below) as defined in the law. Department of Health and Human Services Website lists four intended purposes for PRWORA which are stated as follows (DHS 2016).

- Help needy families so that children can be cared for in their own homes
- Reduce the dependency of needy parents by promoting job preparation, work and marriage
- Prevent and reduce the incidence of out-of-wedlock pregnancies
- Encourage the formation and maintenance of two-parent families

Shifts in priorities allowed for some PRWORA spending to be shifted. Under the condition of the block grant, states must spend at least 75% of grant funds on assistance in some form fitting the stated four missions (Ziliak 2015). As a result, defined benefit funds from AFDC were shifted to work subsidies and earned income tax credits. Child care subsidies were expanded, and emergency contingency funds were added as incentives to keep states' welfare spending at 1994 levels. At the same time, time limits were implemented to encourage work and personal responsibility (24 months without work, and a lifetime limit of 60 months), and states were incentivized to reduce the number of people on the rolls, thereby cutting money from defined benefit programs in order to move it to other programs authorized under the law. Other areas of the new law focused on family promotion, including childcare, new requirements on teenage parents to live at home and stay in school, and still other programs tried to promote stable families through marriage counseling and pregnancy promotion programs. All of these changes led to new categories of spending that will be outlined in the data section and tested for effectiveness.


**Literature Review**

*History*

The first federal welfare program, Aid to Families with Dependent Children, was created in 1935 as part of the New Deal. Created along with the unemployment assistance and social security programs, the original law supported families with one biological parent missing, usual single mothers. This means-tested program was originally administered by the states but regulated by the federal government as states set benefit levels and the federal government set eligibility requirements. In the 1960's the law was expanded twice, first to two-parent families where the primary earner was unemployed and then as the tax rate for additional outside earnings was shifted from 100% down to 67% (Moffit 2002). After surviving several court challenges in the 1970's as benefit levels and eligibility requirements were tested, the next major modification to the law came in 1981 with the Omnibus budget bill. For the first time, states were required to count step-parent income towards eligibility funds, and income requirements were lowered. In addition, states were now allowed to apply for waivers to experiment with work expectations and job search programs, and the tax rate on additional earnings was raised back to the prior 100% level. In 1988, the waivers to experiment with work programs were expanded under the Family Support Act, with the federal government now supplying matching grants to the states to help support work support programs. In addition, the federal government now required transitional Medicaid and food stamps funds for families in the first 12 months transitioning off the AFDC (Ibid). These modifications to the original framework laid the foundation to the TANF that would come with the following decade.

When PRWORA passed in 1997, the bulk of spending shifted from cash assistance to non-cash assistance spending, with nearly 2/3 of spending going to non-assistance by 2010.
While the requirements for the assistance portion, TANF, are very strict, the requirements for participation in the non-assistance categories can be very loose (Ziliak 2012). Especially for categories surrounding the two-parent family formation goal, this makes me suspect the effects on the poverty rates for these categories are likely to be very low, if they exist at all.

*TANF and poverty*

Ziliak found that while the work requirements and caps increased work. However, when Bunch, Liebertz, and Milita examined state-level data, they found that the restrictions did reduce TANF caseloads in the period from 1999 – 2007, a note that was lost in the recession of 2009 – 2012. Overall however, the implementation of TANF did have some positive effect on poverty reduction, especially when controlling for state and time effects. However, these effects were minor and not statistically significant, especially when controlling for unemployment, prior poverty rate, unemployment, and political ideology. Education was the one suspected factor that did not correlate with poverty rates in any way (Bunch, Liebertz and Milita 2017). Additionally, when Muennig, et al (2015) examined the public health effects of TANF, they found a small noticeable increase in mortality rates for TANF recipients after the switch. This study also found that work rates were higher for able-bodied women with a small number of children, with many of the other mothers switching to Social Security Disability and other government benefits after leaving TANF, due in part to a lack of responsiveness to increased need in economic dips (Meunnig 2015). Overall I expect each program to have little effect in reducing the poverty rate, especially when controlling for state and time fixed effects.

*Categories*

While much research has been done on the effectiveness of TANF on reducing poverty, very little research has been done in regards to the different categories of spending that occurred in the
The aftermath of this reform act and the effective changes of poverty. Consequently, I will now examine each category individually in how it relates to poverty. The categories examined include the effectiveness of family support programs from marriage promotion and sex education, to head start and work assistance, to cash assistance and earned income tax credit and similar programs.

*Marriage Promotion Programs*

The effectiveness of the marriage promotion programs and two-parent family promotion. Based on the data from the Census Bureau that shows better outcomes for children growing up with two married parents in the home (1997) marriage promotion programs became a key part of TANF, overlapping with 2 of the four stated missions as growing up in this type of family has been shown to reduce teen pregnancy and suicide, and increase high school graduation rates (Amato 2005). However, research has shown marriage promotion programs to have no clear effect on families, and the women and families most in need of the boost and most likely to receive access to these programs are the least likely to benefit from them. An article from Kristi Williams at Ohio State University summarizes data that show that single mothers who marry later in life are less likely to benefit from the marriage as in most cases they choose partners with few economic resources to benefit from. Additionally, the children of the parents who married later in life showed none of the benefits of the children who grew up with father. Rather the Williams study recommends trying to delay childbirth, but even this has its challenges as we will see in the next section (Williams 2014). The next article, Lundquist, et al. (2014) found that the largest and most popular program, Supporting Healthy Marriage Initiative, a workshop program designed to help promote healthy relationships within married couples, while showing some lasting effects on marriage happiness, is largely ineffective in achieving the goals of TANF.
There was no difference in separation rates for couples who attended the program versus those who didn't, and nor was there any lasting effect on child well-being 30 months on (Lundquist, et all 2014).

The effectiveness of certain programs trying to delay pregnancy and childbirth is also questionable. In a 2005 article, a study from the Brookings institution, Abstinence-only sex education has been shown in several studies to be less effective than comprehensive sex education in preventing teenage-pregnancy, with one study showing no difference in pregnancy rates between those receiving abstinence-only sex education and no education whatsoever, and only comprehensive sexual education having any noticeable effect.

*Head Start*

Sabol and Chase-Lindsay found that while some families receiving Head start assistance saw notable improvements in educational attainment, those with a high school diploma or less saw no noticeable effect on either earnings or educational attainment compared with those with some college but no degree. However, the study also notes that the data is difficult to collect for employment (some states listed work preparation activities as work) so the evidence remains inconclusive (Sabol, Chase-Lindsay 2014). Overall, the evidence remains inconclusive, with evidence from prior years showing lasting improvement gaps, and the effects fading in studies from the early 2000's and uncertain long-term effects (Gibbs, Ludwig and Miller 2011).

*Work Programs, Work and Income*

Because these programs are largely run by the states, there is some variation in the types of programs offered in different areas, but overall outcomes remain largely the same. Bryner and Martin (2005) found little to no difference in employment outcomes between workers receiving the program help and those not receiving work supports, for each additional increase in income
was offset by an equivalent decrease in benefits in the four-year period studied. While a Florida Program showed moderate employment increase in the first two years, any benefit had quickly disappeared by year four. A Vermont program subsidizing employment with payments and without as much of a reduction in cash benefits found a largely positive effect in earnings from work, but as with the previous programs, this increase was offset by decreases in benefits over time. While combined with the time limits, the paper found an increase in work earnings (a goal of PRWORA), the overall incomes did not increase, due to a reduction in benefits, and families with young children income gains are largely limited. The study also notes a lack of evidence in evaluating TANF programs due to the variability of programs across the states, and a variation in participation requirements (Bryner and Martin 2005). A third evaluation, Autor and Housman (2010) evaluated Work First, a temporary job-help program had no effect on long-term employment outcomes, throwing into question the whole premise of these work-support programs (Autor and Houseman 2010). Finally, According to a 2010 study entitled Welfare to Work, the short-term programs that emphasized job finding were no more effective in promoting workforce participation and poverty exit than short-term education programs. Rather welfare and work were more likely to be affected by the strength of the local economy and the level of generosity of welfare benefits, with employed individuals being significantly more likely to leave the welfare rolls than their counterparts (Kim 2015).

**Earned Income Tax Credits (EITC)**

This program has been shown to be effective in reducing poverty and improving outcomes for children receiving the benefits. The first study found a correlation of increased EITC payments with an increase in employment, especially in areas with outreach about the program and a high county employment rate (Bryner and Martin 2005). Families with older
children (above the age of 8) were especially likely to take advantage of the credit. However, these increases in employment were in some cases negated by increases in family size (Hotz et al 2006). An additional study (Chetty, et al 2012) finds a significant (5%) increase in earnings for recipients of the EITC, even when controlling for neighborhood and phase-out regions. Using a longitudinal survey with data collected from 1979-2000, Hamad and Rekhoff (2016) found an overall improvement in behavioral outcomes for children of families receiving the EITC. Additional increases in measured behavioral outcomes were correlated with the size of the payments, with the children of single mothers showing the most increases.

**PRWORA and Welfare Recipients:**

Ben-Shalom, Moffit, and Scholz (2011) note that overall transfer programs reduce the post-cash transfer deep poverty rate (those making less than 50% of the poverty line) by 14 points, and reduces post-benefit poverty and near poverty rates by nearly 14 points. However due to the change in assistance, the post-transfer deep poverty rate has been increasing between 1984 and 2004, just as benefit spending has been declining.

One final note regarding the effectiveness of the TANF program in particular: While under AFDC, the number of welfare recipients fluctuated irregularly, with population in before the 1960's, and then with the different modifications afterwards, overall benefit levels have dropped since the 1980's and cannot explain the fluctuations in spending (Moffit 2002). And while the number of adults receiving benefits has dropped, the number of families in which children are the only beneficiaries of welfare payments (something not constrained by lifetime caps) has increased four-fold in the period from 1990-2013, putting numbers back to the 1960's composition of 75% children. Additionally, while the number of total cases of assistance are tracked, the non-assistance caseloads have not been tracked, making the true impact of
PRWORA difficult to calculate (Ziliak 2015). Especially in accordance with the time limits Mazzolari (2007) found that the caseloads dropped the closer people got to their time limits, and that they had a very real effect on TANF recipients, especially when accounting for the personal characteristics.

Data

The primary source of the data is the website of the Department of Health and Human Services, which has data on first AFDC spending and then TANF spending by category for every year since 1962, when AFDC was first passed. This is the source for all numbers related to TANF allocations by category. Control data comes from the Center for Poverty Research at the University of Kentucky.

Categories

The data is analyzed based on the following categories. As the original dataset contained dozens of categories, the ones listed below are my condensation of dozens of datasets into a manageable list, loosely based off the categories in the original documents.

From the Prior Law (AFDC); Assistance and Administration

- Benefits and Emergency Assistance
- Childcare
- administration
- Jobs and Work Support (including transportation)

New Categories from TANF Spending

- Child welfare and home visits,
- Family maintenance programs, including out-of-wedlock and two-parent family promotion programs
• Other Child welfare programs, including Head Start, After School Programs, Domestic Violence and Substance Abuse programs,
• Refundable tax credits (EITC and related state programs)
• Other transfers, including Social Services Block Grant, Childcare discretionary, and transitional services for the unemployed
• Other – everything else, including Foster care, Juvenile Justice, both assistance and non-assistance

Final categories:
• Benefits and Emergency Assistance
• Childcare
• Jobs and Work Support
• Administration
• Tax Credits
• Family maintenance
• Transfers to other programs
• Other

*Benefits and emergency assistance* - this is what people typically think of when they think of TANF or welfare. This includes any and all direct transfer payments to individuals and families. However, unlike the prior law, under TANF proof of work or educational activity is required, and the program, while mainly federally funded, is administered by the states, with differing time limits and work requirements. In general, an individual cannot receive benefits from the program for greater than 60 months as a lifetime cap as well as emergency assistance – this category
includes temporary, non-recurrent benefits, typically reserved for emergency situations. This
category is a carry-over from the prior law, AFDC.

**Childcare** – these are subsidies given to individuals to help pay for childcare and thus enable
them to work and support themselves. At this point, before I have completed the analysis, I
predict the effect to be quite large.

**Jobs and work supports** – this category includes everything from subsidized work programs
to education and transportation to and from work. This category is especially important because
one of the stated goals of TANF is to promote work as a way out of poverty.

**Family Maintenance** – this was one of the most surprising categories of spending. In this
case, funds are spent on two-parent family promotion and pregnancy prevention, including, in
some states, abstinence-only sex education. Included also in this category are family
maintenance programs. Under AFDC, states were required to spend part of their funds on
programs that promoted child welfare such as foster care and home visits to promote child safety.
This is the one category of spending that satisfies not one but three of TANF's stated missions.

**Administration** - these costs are related to implementation of the program and are capped at
15% of total funding.

**Transfers to Other Programs** - Current law allows up to 30% of federal TANF allocations to
be transferred to the Social Service Block Grant and Child Care and Development Fund. Because
they are not TANF-related programs, they merit their own category. According to the
Administration for Children and Families, in 2014, states spent the allocations for the Social
services block grant on everything from foster care and child protective services to adult daycare
and family planning services (ACF 2015). The Child Care and Development Fund [CCDF] is
more directly related to the stated goals of PRWORA in that it subsidizes child care as well as state agencies that enable the enforcement of laws surrounding it.

*Other* - this category includes everything else, from the other category (as defined by HHS) to systems to juvenile justice payments and the Individual Development accounts. This category is the one into which all the leftover categories are thrown into.

**Control variables:**

These variables are ones I'm using to control for. These include time effects (denoted by year) and state effects. These also include state populations, unemployment rates, fraction of state house and senate that are Democratic, gross state product, state average personal income, and state and federal minimum wage levels. Each of these variables is expected to account for some part of the poverty rate, with the state effects controlling for variables like racial composition and education levels, and time effects controlling for recessionary periods.

Unemployment is directly related to poverty, with poverty defined as a lack of a minimum income and unemployment defined as lacking a job or means to make an income, and minimum wage directly relates to income of the poorest Americans. Gross state product and state personal income are two variables that measure the strength of the states' economies, and Democratic governing numbers control for the differing levels of other social programs.

**Hypothesis**

Based on my prior research, I have formulated a hypothesis that concerning the respective test variables. I believe that benefit spending will have a minimal effect on the poverty rate because benefits are not counted in the official definition of poverty and because one cash transfer could be income that fulfills a need of the recipient.

Additionally, I suspect work supports, earned income tax credit, and child care to have the largest impacts on reducing poverty because those are the programs that theoretically enable
work and work and income. The programs that I suspect to have no to positive effects on the poverty rate are the administration, family maintenance, and transfers because those have not been directly linked to poverty reductions. Additionally, I expect the state and unemployment control variables to have the most significant effect on poverty rates.

**Modeling**

The next thing I did was do a basic regression of my test variables, excluding the controls. The model reads as follows: 

$$\text{Poverty Rate} = \beta_0 + \beta_1 \text{total assistance} +$$

$$\beta_2 \text{Administration} + \beta_3 \text{Childcare} + \beta_4 \text{Family Maintenance} + \beta_5 \text{Tax Credits} +$$

$$\beta_6 \text{transfers to other programs} + \beta_7 \text{other} + \beta_8 \text{work assistance}$$

The second model utilized the same model as above, but added in the control variables:

$$\text{Poverty Rate} = \beta_0 + \beta_1 \text{total assistance} + \beta_2 \text{Administration} + \beta_3 \text{Childcare} +$$

$$\beta_4 \text{Family Maintenance} + \beta_5 \text{Tax Credits} + \beta_6 \text{transfers to other programs} +$$

$$\beta_7 \text{other} + \beta_8 \text{work assistance} + \beta_9 \text{Unemployment Rate} +$$

$$\beta_{10} \text{Gross State Product} + \beta_{11} \text{Total Personal Income} +$$

$$\beta_{12} \text{Total TANF recipients} + \beta_{13} \text{Total food stamps recipients} +$$

$$\beta_{14} \text{Governor Democrat} + \beta_{15} \text{Fraction of State House Democrat} +$$

$$\beta_{16} \text{Fraction State Senate Democrat} + \beta_{17} \text{Federal Minimum Wage} +$$

$$\beta_{18} \text{State Minimum Wage} + \beta_{19} \text{Total Social Security recipients} +$$

$$\beta_{20} \text{total Medicaid beneficiaries} + \beta_{21} \text{WIC Participation} +$$

$$\beta_{22} \text{Total free reduced price lunch recipients}$$

The final two models included all prior variables but adds in controls for state and year, to control for factors like recessions, and other state effects. Note that they are two variations on
the same model, but utilize two different commands on STATA and control for state and time effects in similar ways. These models read as follows:

*Poverty Rate*

\[ P_{overt} = \beta_0 + \beta_1 \text{total assistance} + \beta_2 \text{Administration} + \beta_3 \text{Childcare} \]

\[ + \beta_4 \text{Family Maintenance} + \beta_5 \text{Tax Credits} \]

\[ + \beta_6 \text{transfers to other programs} + \beta_7 \text{other} + \beta_8 \text{work assistance} \]

\[ + \beta_9 \text{Unemployment Rate} + \beta_{10} \text{Gross State Product} \]

\[ + \beta_{11} \text{Total Personal Income} + \beta_{12} \text{Total TANF recipients} \]

\[ + \beta_{13} \text{Total food stamps recipients} + \beta_{14} \text{Governor Democrat} \]

\[ + \beta_{15} \text{Fraction of State House Democrat} \]

\[ + \beta_{16} \text{Fraction State Senate Democrat} + \beta_{17} \text{Federal Minimum Wage} \]

\[ + \beta_{18} \text{State Minimum Wage} + \beta_{19} \text{Total Social Security recipients} \]

\[ + \beta_{20} \text{total Medicaid beneficiaries} + \beta_{21} \text{WIC Participation} \]

\[ + \beta_{22} \text{Total free reduced price lunch recipients} + \beta_{23} \text{state} \]

\[ + \beta_{24} \text{Year} \]

**Results**

This section details my results.

[Insert Table 1 Here]

In the first regression, I tested all my categories against the poverty rate. Initially the only categories showing anything close to a significance level were the Other and the Transfers to Other Programs categories. The Other category showed coefficient value of .0437 and a t-value of 4.44. The transfers category showed a coefficient of -.056 and a t-score of -2.73 The other
categories showed p-values ranging from .23 to .91, showing no statistical significance at this level.

[Insert Table 2 Here]

The second regression I ran included my control variables from unemployment to the number of recipients for the various social programs. In this regression, the other category was no longer statistically significant with a new t-statistic of 1.69. The transfers to other programs category remained statistically significant, but the t-statistic dropped to -1.85 from the prior high of 2.79. Notable other categories with t-statistics with absolute values above 3 include unemployment, total state income, number of Medicaid, food stamps, and SSI recipients; state and federal minimum wages, and if the governor was a democrat (this surprisingly had a t-statistic of –3.44).

[Insert Table 3 Here]

In this regression, I controlled for state and year fixed effects, in addition to the rest of my control variables. Insignificant categories again included Assistance, Administration, and Other, along with Family Maintenance; however the rest of the test categories showed some level of significance. Jobs and Work Assistance came in with a coefficient of .007, an error of .003, and a p-value of .03. Tax Credits had a coefficient of .01, an error of .004, and a p-value of .02, with the Childcare category having a coefficient of -.005, an error of .002, and a p-value of .05. The final significant category was Transfers to Other Programs, with a coefficient of -.023, an error of .01, and a p-value of .02. Significant control variables included Unemployment, Party of the State's Governor, the Federal Minimum Wage, and the Number of Food Stamps Recipients.

Analysis and Conclusions

Overall, when all variables are accounted for, the categories of spending from PRWORA act have some significant effects. Jobs and work support programs came in with an expected
level of significance but the coefficient showed a .007 increase in the poverty rate for the given state and year which was not predicted. However this makes sense, as an individual partaking in a job training program is less likely to be working and therefore earning income as he pursues his studies. However since the combined category is so complex, including everything from job training to subsidized work to transportation subsidies, more research is needed to determine which of the subcategories has the effect of increasing the poverty rate. Additionally, this paper only addresses the short-term effects on poverty of the spending categories, and this program may have effects stretching out beyond the scope covered.

The Tax Credit category also had a level of statistical significance that I had somewhat predicted. With a coefficient of -.01, this showed for each increase of the spending on the Earned Income Tax Credit and similar tax credit programs, the poverty rate dropped, especially when controlling for state and year effects. This does make sense, as tax credit programs reward families and individuals for working by giving a refund if an individual works but earns income below the poverty level. By giving a refund in amounts to the difference between the individual’s earning and the poverty level for their family size, it makes sense that this program has a direct impact on poverty.

The Child Care category was the third category that showed a level of statistical significance when controlling for state and time effects. With a coefficient of -.005, this was the third category I had expected to have an effect on the state’s poverty rate in the short-term. Childcare itself is a major expense for mothers, and if a mother is not earning enough to cover the expense of caring for young children, it makes no financial sense for her to go back to work and push herself over the official poverty measure.
The most surprisingly significant category was that the Transfers to Other Programs Category, with a coefficient of -.023. This was unexpected, as I had not seen prior research into the effects of general social service spending having a significant negative effect on poverty. (A majority of spending transfers went directly to the Social Services Block Grant.) This is a place where I would recommend additional research as my model failed to explain the why of this effect.

The control variable prediction was the prediction that was closest to the actual outcome, with the unemployment rate and the federal minimum wage having large significant effects on the poverty rate, and the state effects also differing by various amounts. The unemployment rate effects were to be expected as the rate to which a population lacks jobs and income has a direct impact on the poverty rate (lack of income). The federal minimum wage also most directly affect workers on the lower end of the income spectrum, and has a significant effect on their earnings. Additional variables that I didn’t expect to be statistically significant but were include whether or not the governor of the state was a Democrat, the number of food stamps recipients, and the total personal income, all of which were controlled for on the state level. These were in fact surprising, but make sense since Democrats tend to favor more generous social programs, since food stamps allow for spending in other categories on the individual level, and a higher total personal income in a state can be thought of as inversely related to poverty.

**Block grant and spending**

The biggest change to the welfare programs in the shift from AFDC to PRWORA was from a defined benefit program administered by the federal government to a block grant administered by the states. This allowed a shift in benefit spending, from a total of nearly 12 million dollars in 1980, (seventeen years prior to the implementation of PRWORA) to 9.5
million dollars in 2002 (five years post PRWORA) to 7.8 million dollars in 2015 (the most recent data available) (HHS 2005, OFA 2015). This may alone may cause changes in the effectiveness of the programs, due to lack of uniformity between programs among the states, and is another area where more research may be needed.

Conclusion

In conclusion, variations in spending through the PRWORA have some noticeable effects on state poverty rates in the short-term, with spending on childcare, tax credits, and jobs and work supports, all having t-statistics well above the 95% confidence interval. While this model calls into question the effectiveness of spending on certain categories, namely family maintenance programs and the non-categorized programs in the other category, overall the model supports much existing spending in reducing poverty, at least in the short term.

Options for future research include a comparison of overall dollar for dollar spending on TANF when compared to WIC, Food Stamps, and unemployment benefits to see which has any level of effectiveness on reducing poverty rate, as well as additional work into why the programs work as well as they do. Additionally, some more long-term analysis may be called for as certain programs like Family Maintenance may take some time to show an effect. An additional question would be to check the effectiveness on the spending of the test categories against the supplemental poverty rate, which includes benefits and transfer payments. But as for now, there can be some conclusive proof that in the short-run spending on tax credits, work assistance, and childcare under PRWORA cause some reduction on state poverty rates in the short run.
### Tables

**Table 1**

**Regression 1**

| Poverty Rate                  | Coefficient | Standard Error | T     | P>|t|  | [95% Conf. Interval] | * |
|-------------------------------|-------------|----------------|-------|------|----------------------|---|
| Benefits and Assistance       | 0.0007788   | 0.0073792      | 0.11  | 0.916| -0.014               | 0.015 |
| Other                         | 0.0436868   | 0.0098327      | 4.44  | 0    | 0.024                | 0.063 |
| Administration                | 0.0705946   | 0.0578754      | 1.22  | 0.223| -0.043               | 0.184 |
| Transfers to Other Programs   | -0.0556266  | 0.0203418      | -2.73 | 0.006| -0.096               | -0.016 |
| Jobs and Work Support         | -0.0112011  | 0.0102886      | -1.09 | 0.277| -0.031               | 0.009 |
| Family Maintenance            | 0.0171239   | 0.0223906      | 0.76  | 0.445| -0.027               | 0.061 |
| Childcare                     | -0.0018354  | 0.0070419      | -0.26 | 0.794| -0.016               | 0.012 |
| Tax credits                   | -0.0119001  | 0.0113343      | -1.05 | 0.294| -0.034               | 0.010 |
| Constraints                   | 12.40573    | 0.1279437      | 96.96 | 0    | 12.155               | 12.657 |

Number of obs = 966
F(8,957) = 4.87
Prob > F = 0.0000
Root MSE = 3.3716
## Table 2

### Regression 2

| Poverty Rate                        | Coefficient | Standard Error | T    | P>|t| | [95% Conf. Interval] | * |
|-------------------------------------|-------------|----------------|------|-----|----------------------|---|
| Benefits and Assistance             | -0.010      | 0.006          | -1.53| 0.125| -0.022 0.003         |   |
| Other                               | -0.009      | 0.008          | -1.12| 0.263| -0.024 0.007         |   |
| Administration                      | -0.039      | 0.042          | -0.92| 0.357| -0.121 0.044         |   |
| Transfers to Other Programs         | -0.031      | 0.017          | -1.85| 0.065| -0.064 0.002         |   |
| Jobs and Work Support               | 0.003       | 0.007          | 0.4  | 0.692| -0.012 0.017         |   |
| Family Maintenance                  | 0.009       | 0.016          | 0.56 | 0.574| -0.023 0.041         |   |
| Childcare                           | -0.008      | 0.005          | -1.61| 0.107| -0.018 0.002         |   |
| Tax credits                         | 0.000       | 0.008          | -0.02| 0.983| -0.017 0.016         |   |
| Unemployment Rate                   | 0.451       | 0.054          | 8.340| 0.000| 0.345 0.558          |   |
| Federal Minimum Wage                | 0.614       | 0.144          | 4.270| 0.000| 0.332 0.896          |   |
| Total Personal Income               | -0.217      | 0.049          | -4.440| 0.000| -0.312 0.121         |   |
Table 3

**Regression 3**

| Poverty Rate                          | Coefficient | Standard Error | T     | P>|t| | [95% Conf. Interval] | * |
|--------------------------------------|-------------|----------------|-------|-------|----------------------|---|
| Benefits and Assistance              | -0.004      | 0.003          | 1.380 | 0.175 | -0.010               | 0.002 |
| Other                                | -0.004      | 0.005          | -     | -     | -0.014               | 0.007 |
| Administration                       | 0.035       | 0.245          | 1.410 | 0.166 | -0.015               | 0.084 |
| Transfers to Other Programs          | -0.023      | 0.010          | 2.340 | 0.023 | -0.043               | -0.003 |
| Jobs and Work Support                | 0.007       | 0.003          | 2.320 | 0.030 | 0.001                | 0.013 |
| Family Maintenance                   | -0.005      | 0.008          | 0.610 | 0.548 | -0.022               | 0.012 |
| Childcare                            | -0.005      | 0.002          | 2.000 | 0.052 | -0.010               | 0.000 |
| Tax credits                          | -0.010      | 0.004          | 2.440 | 0.019 | -0.018               | -0.002 |
| Unemployment Rate                    | 0.373       | 0.053          | 6.990 | 0.000 | 0.265                | 0.480 |
| Federal Minimum Wage                 | 0.429       | 0.154          | 2.790 | 0.008 | 0.120                | 0.738 |
| No. Food Stamps Recip.               | 0.020       | 0.003          | 5.970 | 0.000 | 0.013                | 0.027 |
| Governor Democrat?                   | -0.410      | 0.157          | 2.610 | 0.012 | -0.727               | -0.094 |
Bibliography


