



National Poverty Center Working Paper Series

#12 – 12

May 2012

The Welfare Reforms of the 1990s and the Stratification of Material Well-Being among Low-income Households with Children

H. Luke Shaefer, University of Michigan and Marci Ybarra,
University of Chicago

This paper is available online at the National Poverty Center Working Paper Series index at:
http://www.npc.umich.edu/publications/working_papers/

Any opinions, findings, conclusions, or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Poverty Center or any sponsoring agency.

The Welfare Reforms of the 1990s and the Stratification of Material Well-Being among Low-Income Households with Children

Forthcoming in *Children and Youth Services Review*

May 7, 2012

H. Luke Shaefer
Assistant Professor
School of Social Work, University of Michigan
Research Affiliate
National Poverty Center
lshaefer@umich.edu
734.936.5065

Marci Ybarra
Assistant Professor
School of Social Service Administration, University of Chicago
mybarra@uchicago.edu

Abstract

We examine the incidence of material hardship experienced by low-income households with children, before and after the major changes to U.S. anti-poverty programs during the 1990s. We use the Survey of Income and Program Participation (SIPP) to examine a series of measures of household material hardship that were collected in the years 1992, 1995, 1998, 2003 and 2005. We stratify our sample to differentiate between the 1) deeply poor (<50 percent of poverty), who saw a decline in public assistance over this period; and two groups that saw some forms of public assistance increase: 2) other poor households (50-99 percent of poverty), and 3) the near poor (100-150 percent of poverty). We report bivariate trends over the study period, as well as presenting multivariate difference-in-differences estimates. We find suggestive evidence that material hardship—in the form of difficulty meeting essential household expenses, and falling behind on utilities costs—has generally increased among the deeply poor but has remained roughly the same for the middle group (50-99 percent of poverty), and decreased among the near poor (100-150 percent of poverty). Multivariate difference-in-differences estimates suggest that these trends have resulted in intensified stratification in the material well-being of low-income households with children.

This project was supported in part by Cooperative Agreement 1 U01 AE000002-03S1 between the National Poverty Center at the University of Michigan and the Office of the Assistant Secretary for Planning and Evaluation at the U.S. Department of Health and Human Services; in part by the National Science Foundation under Grant No. SES 1131500; and in part by funds provided by the Ford Foundation to the Research and Training Program on Poverty and Public Policy at the University of Michigan. The opinions and conclusions are solely those of the authors and should not be construed as representing the opinions or policies of the National Poverty Center, the Ford Foundation, the United States Department of Health and Human Services, or the National Science Foundation. The authors thank Julia Henly and four anonymous reviewers for helpful comments.

1. Introduction

In 1996, Aid to Families with Dependent Children (AFDC) was replaced with Temporary Assistance for Needy Families (TANF), thereby ending the only cash entitlement program in the U.S. for poor families with children. Unlike AFDC, TANF imposes a maximum 60-month lifetime limit on the use of federal funds to support participants and requires that able-bodied recipients participate in work activities. Other major social policy reforms during the 1990s—such as the expansions of the Earned Income Tax Credit (EITC), increases to the minimum wage, and increased subsidization of child care—raised the benefits of work for low-income families. We refer to these collectively as the welfare reforms of the 1990s. As a result of these changes to public programs and the booming economy of the 1990s, there was a dramatic decline in cash assistance caseloads, accompanied by an unprecedented increase in the employment of poor, single, mothers with young children into the labor market (Blank, 2002; Danielson & Klerman, 2008).

Recent research finds that the welfare reforms of the 1990s resulted in decreased public assistance for deeply poor households, but actually increased public assistance for other low-income households, especially the near poor (Ben-Shalom et al., 2011). Based on the assumption that public assistance is beneficial to the material well-being of low-income households, we hypothesize that the 1990s welfare reforms increased material hardship among the deeply poor but decreased material hardship among the near poor, leading to increased stratification in the material well-being of low-income households with children.

To explore this hypothesis, we use the Survey of Income and Program Participation (SIPP) to examine three measures of household material hardship that were collected in 1992, 1995, 1998, 2003 and 2005. We stratify our sample by household income as a percent of poverty, to differentiate between households with children who are 1) deeply poor (< 50 percent of poverty),

2) other poor households (50-99 percent of poverty), and 3) near poor (100-150 percent of poverty). We report bivariate trends over the study period, as well as presenting multivariate difference-in-differences estimates. We find suggestive evidence that material hardship—in the form of difficulty meeting essential household expenses and falling behind on utilities costs—has increased among the deeply poor but has decreased among other low-income groups, particularly the near poor, resulting in intensified stratification in the material well-being of low-income households with children.

2. *Literature Review*

The welfare reforms of the 1990s made cash assistance receipt more restrictive through the implementation of work requirements and time limits. However, these reforms increased the returns of low-wage work through expansions of the Earned Income Tax Credit, an increase in the minimum wage, and the provision of ancillary supports such as subsidized child care. Underlying the substantial overhaul to the safety net was the assumption that work and the appropriate supports, rather than welfare receipt, would result in improved economic, social, and material outcomes among low-income families, particularly single mother families.

A number of studies have examined the effects of the welfare reforms of the 1990s on the well-being of low-income households with children, especially those headed by single mothers. These studies generally report mixed economic outcomes. Employment among single mothers in particular grew at an unprecedented rate during the 1990s, leveling off but remaining elevated in the 2000s. Among low-income families, though, wages and job quality are typically low, and poverty rates remain high, even among those who work (Cancian, Haveman, Meyer, & Wolfe, 2002; Johnson & Corcoran, 2003; Pavetti & Acs, 2001; Danziger, Heflin, Corcoran, Oeltmans, & Wang, 2002; Wu, Cancian, Meyer, 2008). Still, there is some evidence that the welfare

reforms of the 1990s may have, on the whole, improved the well-being of some low-income households, particularly those headed by single mothers. For example, Meyer and Sullivan (2004) compare the total annual consumption of single mother households to single childless women and married women households from 1984 to 2000. They find that the consumption of single mother households grew considerably during the late 1990s, relative to these comparison groups, suggesting that single-mother households had greater resources post-reform to fuel this growth in consumption.

Comparing average levels of material well-being across all low-income households with children before and after the 1990s reforms could lead to inaccurate conclusions, though. The 1990s reforms differentially impacted certain sub-populations among the poor and may have led to improved well-being among some groups and reduced well-being among others. In particular, a number of studies have found that deeply poor households, defined as those with incomes below 50 percent of poverty, often have the most significant challenges that preclude or limit work participation. Families with the lowest incomes have higher reports of physical and mental health disabilities relative to their higher earning, more stably employed counterparts (Jayakody, Danziger, & Pollack, 2000; Danziger, Kalil, & Anderson, 2002; Danziger & Seefeldt, 2003).

If public assistance in the post-reforms era is conditioned on work, then deeply poor households who have greater difficulty engaging in stable work activity may have been particularly negatively impacted. Indeed, it appears that instead of cutting means-tested public assistance on the whole, the reforms of the 1990s redirected resources away from deeply poor households to other groups of low-income households in the form of increased work subsidies. Ben-Shalom, Moffitt and Scholz (forthcoming) analyze data from the Survey of Income and Program Participation (SIPP) for the years 1984 and 2004, monetizing the value of all major

means-tested and social insurance transfer programs, such as housing subsidies, the Supplemental Nutrition Assistance Program, and the Earned Income Tax Credit. They report a sizeable decline in public transfers to deeply poor families (below 50 percent of the poverty line). In contrast, poor families with higher incomes realized substantial increases in public transfers, most notably SNAP (through eligibility liberalizations) and the EITC, post reforms.

For example, Ben-Shalom and colleagues estimate that in 1984, single-parent families under 50 percent of poverty received an average of \$1,231 (in 2007 dollars) in monthly public transfer expenditures. By 2004, this had fallen to \$766, a decline of 38 percent. However, among single parent families between 50 and 100 percent of poverty, this figure went from \$448 in 1984 to \$832 in 2004, an 86 percent increase. For near poor single parent families (between 101-150 percent of poverty), average monthly public transfer expenditures increased from \$192 in 1984 to \$563 in 2004, an increase of 193 percent. Similar trends were observed for two parent families. This is likely because higher income poor and near poor families are far more likely than their deeply poor counterparts to include a stable worker and thus benefit from the EITC and other work supports. In contrast, deeply poor households are less likely to include a consistent labor force participant, and saw their access to cash assistance significantly retrenched in the 1990s. Thus, in terms of access to cash and near-cash public assistance, the deeply poor appear to have been worse off in 2004 than they were prior to the reforms of the 1990s, while other low-income groups with more resources were better off (Ben-Shalom et al., 2011).

2.1 Material hardship as a measure of the well-being of low-income households

While income and poverty rates are important metrics for understanding the impact of the welfare reforms of the 1990s on poor households with children, scholars agree these measures may not fully capture the deprivation experienced by households (Mayer & Jencks, 1989). In

recent years, scholars have increasingly analyzed measures of material hardship as alternatives to the official poverty line for assessing the well-being of low-income families (Cancian & Meyer, 2004; Heflin, Sandberg & Rafail, 2009; Mayer & Jencks, 1989; Sullivan, Turner & Danziger, 2008; USDHHS, 2004). Such measures “employ direct indicators of consumption and physical living conditions to examine whether families meet certain basic needs” (USDHHS, 2004, p. V).

While material hardship has gained prominence as a way to assess the well-being of poor families, there remains no official measure (Cancian & Meyer, 2004; USDHHS, 2004). Past research most often uses measures of food hardship, difficulty paying for housing, unmet medical needs, and difficulty paying for essential household expenses such as rent or utilities (Sullivan et al., 2008; Cancian & Meyer, 2004; Shook Slack, et al., 2007; Eamon & Wu, 2011; Henly, Danziger, & Offer, 2005; Wu & Eamon, 2010).

While there remains some debate about the strength of the relationship between income level and the incidence of material hardship, and the coherence across different hardship domains (see Heflin et al., 2009), studies generally find that low-income households are more likely to experience material hardship than their higher-income counterparts (Beverly, 2001; Eamon & Wu, 2011; Lovell & Oh, 2005; Sullivan et al., 2008; USDHHS, 2004). While previous studies have found little evidence that cash assistance leavers in the TANF era differ from earlier AFDC leavers in terms of income and earnings levels, there is evidence that a greater share of TANF leavers report experiencing material hardship such as an inability to pay rent, or utility bills, and not having enough food, post reform (Loprest, 2001). In general, studies find that material hardship remains common among welfare leavers post reform (Acs, Loprest & Roberts, 2001; Corcoran, Heflin, & Siefert, 1999), although estimates vary significantly across studies largely

because of lack of agreement as to how to define and measure material hardship (Shook Slack et al., 2007).

3. Current Study

To our knowledge, the current study is the first to use nationally representative survey data to compare the material hardship of deeply poor households with children to other low-income groups of low-income households with children, before and after the 1990s welfare reforms. Because these reforms decreased the amount of public assistance received by deeply poor households but raised the amount received by other low-income households, especially the near poor, we expect to see increased stratification in the material well-being of low-income households with children. More specifically, we hypothesize that the welfare reforms of the 1990s led to increased material hardship among the deeply poor, but reduced material hardship among other low-income groups, particularly the near poor.

An alternative stratification might separate households with a worker and household without. Ben-Shalom and colleagues (forthcoming), however, find that even deeply poor families with a worker saw their benefits reduced, post welfare reforms, likely a results of a loss of cash assistance coupled with a small EITC in the phase-in range. In contrast, employed families in the 50 to 99 percent of poverty range and 100 to 150 percent range both saw large increases in aid. Thus, we use income to stratify our sample rather than labor force participation.

4. Method

4.1 Data and Sample

Data are drawn from public use files of the SIPP, collected by the U.S. Census Bureau. Within each SIPP panel, interviews are conducted every four months about each individual in the household for each intervening month, gathering data on demographics, income sources, public assistance program participation, household and family structure, jobs and work history. Each

SIPP panel begins with a new sample. Recent analyses of a number of large nationally representative surveys designed to measure income and program participation find that the SIPP generally does a superior job of measuring the income and public program participation of poor households, although under-reporting of public program participation remains a limitation of studies using household survey data (Czajka & Denmead, 2008; Meyer, Mok, & Sullivan, 2009).

We pool data from the 1991, 1992, 1993, 1996, 2001, and 2004 panels of the SIPP. We restrict our sample to households with minor children (younger than 18 years) and average gross incomes at or below 150 percent of the federal poverty line. To identify our sample, we average household income over the four months preceding our outcome measures. The SIPP's measure of total income includes earnings (both formal and informal), public transfers, and other income (such as rental, investment, and retirement program payments). We do not include the EITC and other refundable tax credits in our income measure, but we use the Taxsim routine housed by the National Bureau of Economic Analysis to estimate the mean amounts of these credits for our sample (see table 2). We consider other poor households to be those with incomes between 50 and 99 percent of poverty, and near poor households to be those with incomes between 100 and 150 percent of the poverty line.

4.2 Outcome Measures

Our key outcome variables are drawn from the topical modules (TMs) administered once per panel, referred to as the “Extended Measures of Well-Being” TM in the 1991 and 1992 panels (providing estimates from 1992); the “Basic Needs” TM in the 1993 panel (providing estimates for 1995); and the “Adult Well-being” topical modules in the 1996-2004 panels (providing estimates from 1998, 2003, and 2005). The SIPP is the primary source of nationally-representative data on material hardship in the US (Bauman, 1999; Beverly, 2001; Heflin et al,

2009; USDHHS, 2004; Wu & Eamon, 2010). Because our goal is to examine trends over time, we are limited to questions that were asked in a consistent way across each of these panels. We use three measures that are available in the years 1992, 1995, 1998, 2003 and 2005.

Our first measure indicates whether a household broadly had difficulty meeting its essential household expenses. Families were asked “Next are questions about difficulties people sometimes have in meeting their essential household expenses for such things as mortgage or rent payments, utility bills, or important medical care. During the past 12 months, has there been a time when (YOU/YOUR HOUSEHOLD) did not meet all of your essential expenses?” Families in households that responded affirmatively were classified as having difficulty meeting essential expenses. We also examine two additional, more specific measures which ask whether a household reported falling behind on their rent/mortgage; and whether they reported falling behind on their utility bills.¹

4.3 Data Analysis

Descriptive estimates examine the incidence of material hardships among the poor, stratifying the sample into sub-groups based on income, as specified above. We pay particular attention to the relative outcomes of the deeply poor relative to the near poor. For multivariate estimates, we utilize a standard differences-in-differences specification to assess the hypothesized divergence of the deeply poor from the near poor. We begin by restricting our sample to low-income households with children, at or below 150 percent of poverty. Our specification is:

¹ Another available outcome is food insufficiency. Households are considered food insufficient if they report that members sometimes or often “did not have enough to eat.” The answer options for the food insufficiency outcome were scaled differently in the 1993 SIPP panel topical module, so that estimates are inconsistent with the other panels. In addition, USDA no longer uses this measure, so we have omitted it from our analyses.

$$MH_{h,j,t} = X\beta_{h,j,t} + \phi Year_{h,j,t} + \gamma(< 50\% \text{ poverty})_{h,j,t} + \lambda(< 50\% \text{ poverty}_{h,j,t} * Year_{h,j,t}) + \alpha(50\% \text{ to } 99\% \text{ poverty})_{h,j,t} + \delta(50\% \text{ to } 99\% \text{ poverty}_{h,j,t} * Year_{h,j,t}) + \varepsilon_{h,j,t} \quad (1)$$

The dependent variables, *MH*, are the three dichotomous material hardships described above: 1) difficulty meeting essential expenses; 2) fell behind on rent or mortgage; and 3) fell behind on utilities. *X* is a vector of individual and environmental characteristics taken at time *t*. These include an indicator if there is a worker in the household the race and ethnicity of the household head (coded into four mutually exclusive categories of white non-Hispanic, Black, Hispanic Origin, and race other); the number of minor children in the household, the age of the household head (broken into age groups, <25; 25-34; 35-44; 45-54; 55-64; 65 and up); an indicator if the household is single female-headed, an indicator if the household head has a work-limiting disability, and an indicator if the household resides in a metropolitan area. To control for changing economic circumstances over time, we include dummies for state of residence and the state-month unemployment rate.² We also include an indicator for the implementation of a welfare waiver program in the state. Standard errors are clustered by state to account for the SIPP's stratified sample design. *Year* indicates the year of the observation.

The interaction terms *<50% poverty*Year* and *50to99% poverty*Year* terms are the difference-in-differences estimators. Starting with the terms for the deeply poor group, with these interaction terms included, the stand-alone *<50% poverty* indicator comes to represent the differences in the risk of the outcome between the deeply poor and the omitted group, the near poor, in the base year, 1992. The interaction terms in the vector *<50% poverty*Year* then represent the change in this differential in later years (1995; 1998; 2003; 2005). If the deeply poor lost ground relative to the poor with higher incomes, then the point estimates associated

² A few states are not uniquely identifiable in the SIPP. As is commonly done, we drop these states from our analysis (Gruber & Simon, 2010). Sensitivity analyses find that this does not bias our point estimates.

with these interaction terms should be positive and statistically significant. The same interpretation is true for the difference-in-differences estimates for the sub-group 50 to 99% of poverty.

Linear probability models are used because the interpretation of interactions is straightforward. In contrast, interaction effects in non-linear models are not easily calculated and must be interpreted with care (Ai and Norton 2003, 123). As a sensitivity analysis, we re-ran our estimates using both probit and logit specifications, and our results are substantively similar to LP results presented here.

5. Results

5.1 Descriptive Results

Table 1 presents key demographic characteristics for the sample across the five years under study. In terms of income-level, deeply poor households saw their mean cash income as a percent of poverty fall a statistically significant 6.5 percentage points from 1992 to 2005, while the other sub-groups saw their mean income remain relatively stable or increase slightly (and this does not account for the EITC, discussed in table 2). This is likely driven by the loss of cash assistance, felt most sharply among the deeply poor. As hypothesized, deeply poor households are the least likely to include a worker, although they were far more likely to in 2005 than before the 1990s reforms. Before reform only a quarter of these households included a worker in any given month, while as of 2005, 41.4 percent did. Households between 50 and 99 percent of poverty increased their work participation considerably with nearly 70 percent including a worker in 2005. Near poor households were by far the most likely to include a worker in all years.

Across all three groups, the proportion with less than a high school degree fell over the study period (the changes are statistically significant for the groups below poverty). Interestingly, female-headed households fell as a proportion of the deeply poor and may have grown slightly (although not statistically significantly) as a proportion of the near poor, likely a result of increased labor force participation among single mothers over the period. The proportion of the deeply poor with a head who is Black also fell over the study period, while remaining stable in the other two sub-groups. The proportion with a Hispanic head grew in all three income ranges. Finally, the proportion of households in which the head has a work-limiting disability was higher among households with incomes under poverty although there were no observed trends over time across the sub-groups.

Table 2 presents estimates of participation rates across a number of public programs. The evidence for deeply poor households is consistent with Ben-Shalom et al. (2011). We find that cash assistance participation fell sharply among the deeply poor, from 55.1 percent in 1992 and 1995 to 15.1 percent in 2005. Interestingly, SNAP participation falls as well, from 74.8 percent to 58.8 percent over this period. The deeply poor group, on average, did see an increase in the value of their annual refundable tax credits (from a mean of \$271 in 1992 to \$863 in 2005), but this benefit likely did not replace the value of lost cash assistance and SNAP benefits. Participation in Supplemental Security Income (SSI) and housing assistance (public housing or SSI) remained relatively stable across the study period for deeply poor households.

Households between 50 and 99 percent of poverty also saw a decline in cash assistance and SNAP, but these declines in participation rates were less severe than those experienced by the deeply poor group. In contrast, their refundable tax credits increased significantly. The mean tax credit for this middle group went from \$896 to \$3,020, a 237 percent increase. Like the

deeply poor, participation in SSI and house assistance programs was stable for this group across the study period.

The experience of the near poor included significant growth in public assistance. Cash assistance among this group also fell, but participation rates were low even in 1992 and 1995. In contrast to the experiences of the other groups, SNAP participation among near poor households remained steady and may have even increased slightly as of 2005. The near poor saw the largest proportional increase in their refundable tax credits, from an average of \$383 in 1992 to \$3,015 in 2005, a 687 percent increase. Once again, access to SSI and housing assistance appears to remain relatively stable across the study period.

5.2 Material hardship outcomes

Table 3 presents descriptive evidence for our three material hardship outcomes. We began by examining these outcomes for all households with children at or below 150 percent of poverty, and found that there were no obvious trends in the incidence of these material hardships over the study period. When the sample is divided by poverty status, though, some divergent trends become apparent. As of 2005, deeply poor households reported increases in the prevalence of two of the three hardships, relative to earlier years. Specifically, 45.2 percent of deeply poor households reported difficulty meeting their essential expenses in 1992. This proportion fell in 1995 and 1998 (as the economy improved) to 37.1 percent and 40.6 percent (respectively) but rose to a statistically significantly higher 48.3 percent in 2005. In 2005, 38.1 percent of deeply poor households reported that they fell behind on their utility bills. This was a statistically insignificant 3.5 percentage points higher than in 1992, but approximately 6-8 percentage points higher than reported in the other years of the study period. Interestingly, the proportion of the deeply poor reporting that they had fallen behind on their rent or mortgage was

slightly lower in 2005, as compared to 1992 (although the difference is not statistically significantly different). However, the proportion in 2005 was above the estimates for 1995, 1998, and 2003.

It is important to note that the increases in hardships experienced by deeply poor households with children described above all occurred between the 2003 and 2005 data points. In fact, relative to the estimates for outcomes in 1992 (when the unemployment rate was quite a bit higher), deeply poor households reported, on average, lower levels of hardship in 1995, 1998, and 2003. However, the changes between 2003 and 2005 described above are statistically significant and substantial.

In contrast to the findings about the deeply poor, table 2 suggests that households between 50 and 99 percent of poverty either saw no change or improvement in the prevalence of these material hardships. These households reported no change in the proportion reporting difficulty meeting essential expenses. They reported some improvement in their ability to pay their housing costs, and no statistical change in the risk of falling behind on utility bills. During the same period, near poor households (100-150 percent of poverty) appear to have significantly lowered their incidence of these material hardships: 37.9 percent of them experienced difficulty meeting essential expenses in 1992, compared to 30.3 percent in 2005. They saw an 8.3 percentage point decline in the risk of falling behind on their mortgage, and a 5.3 percentage point decline in the risk of falling behind on their utility bills. The descriptive evidence offers suggestive support for our hypothesis: the well-being of the deeply poor decreased substantially following the first economic slowdown after the 1990s welfare reforms. In contrast, the well-being of the near poor improved through 2005.

5.3 Difference-in-Differences Estimations

Table 4 reports results from a series of LP regression models that further test the descriptive relations discussed above. Specifically, these models test whether the deeply poor (<50 percent of poverty) lost ground to the near poor (100-150 percent of poverty) between 1992 and 2005. The sample is restricted to households with children at or below 150 percent of poverty. The interaction terms *<50% poverty*Year* are the main difference-in-differences estimator. With these interaction terms included, the stand-alone *<50% poverty* indicator comes to represent the differences in the risk of the material hardship outcome between the deeply poor and the near poor (100 to 150 percent of poverty) in the base year, 1992. The interaction terms then represent the change in this risk differential in later years (1995; 1998; 2003; 2005). If the deeply poor lost ground to the near poor, then the point estimates associated with these interaction terms should be positive and statistically significant. The same is true for the difference-in-differences parameters for the 50 to 99 percent of poverty group. The stand-alone indicator *50to99% Poverty* comes to represent the difference in the risk of material hardship between the deeply poor and near poor in the base year. The interaction terms then represent the change in this differential in each of the following years.

Before turning to the difference-in-differences estimates, we examine some of the other covariates included in the models. Having a worker in the household is associated with a lower risk of material hardship. The number of children in the household is positively associated with increased risk of the material hardships. The differences between households headed by an African American, Hispanics and non-Hispanic whites were all statistically insignificant. Households headed by people of other races and ethnicities appear less likely to report two for the three hardships.

Households in which the head is 55 or older were less likely to report the hardships under study than households in which the head was less than 25. After controlling for other factors, single female-headed households were considerably more likely to report all three hardships under study, when compared to other poor households. We find that households in which the head has a work-limiting disability are far more likely to report experiencing all three material hardship than households in which the head does not have a disability. Finally, we find, as might be expected, that the unemployment rate is positively associated with all three material hardships.

Turning to the difference-in-differences estimators, after controlling for other factors in our models, the point estimates associated with the stand alone *<50% of poverty* indicator suggest that the deeply poor were a statistically insignificant 4.1 percentage points more likely to experience difficulty meeting their essential expenses in 1992, as compared to the near poor. They were a statistically significant 4.5 percentage points more likely to fall behind on their rent/mortgage than near poor households in 1992. The point estimates associated with utilities is a statistically insignificant 1.6 percentage points.

The differential in the risk of these outcomes did not change to a statistically significant degree in 1995, 1998, or 2003, relative to 1992. However, in 2005, the deeply poor saw their relative risk of having difficulty meeting their essential expenses increase by a statistically significant 7.4 percentage points, as compared to near poor households. Their relative risk of falling behind on utility bills increased by a statistically significant 8.3 percentage points. While statistically insignificant, the models suggest that the differential between the deeply poor and near poor households with children in their risk of falling behind on rent/mortgage increased 1.6 percentage points from 1992. Among households between 50 and 99 percent of poverty, the risk

of falling behind on housing or utility costs were somewhat higher than for the near poor in 1992. However, there was no statistically significant change in these differentials in the post-reform era. While the deeply poor appear to have lost ground to the near poor by 2005, there is no evidence that this is true for the 50 to 99 percent of poverty group.

6. Discussion

6.1 Summary

This article considers three types of reported material hardship: the ability to pay for essential expenses, housing and utility costs, among low-income households with children, stratified by income levels from 1992 to 2005. We find that reports of these material hardships are common across our sample waves although the share of households experiencing hardship changes over time and is related to family income, unemployment rates, the presence of a work-limiting disability, and single-female headship, among other factors. When we stratify our sample by income, we find that the deeply poor realized a significant decrease in mean income over the study period, likely a result of reductions in cash assistance. In contrast, the other subgroups had similar or increasing levels of mean income over time, and greatly benefited from expanded refundable tax credits. Our findings concur with Ben-Shalom et al. (2011), who find that public assistance increased among near poor households following the 1990s welfare reforms.

From 1992 to 2005, we find a constant or declining trend (suggesting improvement) in the incidence of material hardship for low-income households with children at or above 50 percent of poverty, across all three measures. In contrast, the deeply poor experienced significant increases in some material hardships in 2005 relative to 1995, 1998 and 2003. Our difference-in-difference estimates suggest that the deeply poor became increasingly stratified from their near

poor counterparts on these outcomes. It appears as though this bifurcation is driven not only by deteriorating circumstances of the deeply poor, but also by the improved circumstances of higher income households. Indeed, it appears that one result of the changes of the 1990s was to deepen the stratification of material well-being, even among low-income households. In 1992, deeply poor households were just 7.3 percentage points more likely to report difficulty meeting their essential expenses. In 2005, this gap was 18.0 percentage points.

Overall, these results suggest the circumstances of the poorest families targeted by reform have diminished over time with these families experiencing both economic and material stress. Significant increases in hardships from 2003 to 2005 may be related to the diminished employment and earning prospects of low-wage workers during the mid-2000s. Rising unemployment associated with the 2001 recession peaked mid-way through 2003. Perhaps deeply poor households were able to draw upon transfers from family and friends or private sources of support during the early 2000s, but these resources had been depleted by 2005 as a result of the stagnated low-wage labor market.

The significant increase in material hardship among the deeply poor from 2003 to 2005 raises contemporary concerns. The Great Recession (2007-2009) was the most severe recession since the Great Depression. It is reasonable to expect that both material well-being and economic opportunities for the working poor declined during this period. At the same time, the substantial expansion of government programs, SNAP and TANF in particular, during the recent recession were designed to help offset expected hardships. Thus, future research should examine the Great Recession period and focus on understanding the extent to which, and for whom, hardship increased, as well as the potential buffering effects of governmental expenditures among low-income families.

6.2 Limitations

This study has several limitations. Most importantly, the estimates are based on six SIPP panels with six samples. In particular, our interpretation of the results rests heavily on point estimates from one year, 2005, so it will be important to see how things change as more recent data are analyzed. Overall, though, the material hardship estimates are quite consistent for the broader sample population across years, which provides some assurance that our results are not being driven by changes in the SIPP across panels. Finally, we do not examine transitions over time in and out of income groups, but rather consider income as a static characteristic. Future research should take a more dynamic approach to these issues.

6.3 Contributions

Notwithstanding these limitations, this study makes important contributions. First, we examine material well-being relative to income groups because past research has demonstrated that income and material hardship are related but not identical and that the deeply poor have been particularly impacted by the welfare reforms of the 1990s. Second, we find that lesser and particularly near poor households report being as well, or better, off materially in the post reform era.

Our findings add to the growing literature demonstrating that the weakest outcomes since the 1990s reforms are largely concentrated among the deeply poor. Research confirms that the deeply poor have negative outcomes across a diverse set of household well-being measures (Cancian, Noyes, & Ybarra, forthcoming; Barth, Wildfire, & Green, 2010; Kalil, Seefeldt & Wang, 2002; Wu et al., 2004; Reichman, Teitler, & Curtis, 2005). Other research has found that among post-reform TANF families, poor mental and physical health is negatively related to material well-being even after accounting for income (Sullivan et al., 2008). Taken together, this

line of research suggests a particular subset of households—the deeply poor—have been left behind by welfare reforms of the 1990s, as they face substantial obstacles to economic success in many instances. At the same time, the conditions faced by the near poor may have been improved by the welfare reforms of the 1990s.

7.1 Implications for social work practice and policy

Our findings suggest that the poor and near poor are not a homogenous group with similar needs and circumstances. Rather, poor and near poor income groups often face different degrees of material hardship, employment stability, and work-limiting disabilities which may lead to disparate family and child well-being outcomes. The 1990s welfare reforms impacted sub-groups of the poor in heterogeneous ways, and so social work practitioners should not assume that the changes were uniformly bad or good. Social work research in particular should be cautious of examining a sample of low-income household with children without taking into account heterogeneous effects.

In order to adequately support such households, social work practitioners must understand the diversity of circumstances among the poor and near poor and have knowledge of the available supports in light of different contexts. For example, to ensure households receive appropriate benefits from public programs requires that practitioners have a working knowledge of program eligibility and remain current on changing rules and requirements.

Social workers delivering services to those seeking employment need to be competent in workforce development policies and services. However, job-related services may be futile if social workers do not appropriately screen for disabilities that may limit work, a significant indicator of material hardship. For populations with multiple barriers to work, scholars have suggested that a short-term disability program, separate from SSI, should be considered given the

extent to which disabilities occur among the deeply poor (Blank & Kovac, 2009) and the difficulty in securing SSI benefits, particularly among single poor mothers who report a work-limiting disability (Schmidt & Danziger, 2010). Others have suggested expanding program knowledge and non-monetary eligibility in the unemployment insurance program so that more low-wage workers might participate and to help smooth tough economic times for low-income families (Shaefer & Wu, 2011; Gould-Werth & Shaefer, forthcoming). Most importantly, policymakers and advocates most consider the divergent trends among low-income households with children as they consider policy change going forward. Among those who can consistently work, it may be that the welfare reforms of the 1990s were a net plus. Those with multiple barriers to consistent work, however, may be doing much worse. In light of our findings and those of others, a key consideration for any future policy reform to means-tested aid should be, will it increase or decrease stratification among the poor?

Table 1: Characteristics of Low-Income Households with Children by Household Income, 1992-2005 (Proportion unless otherwise specified)

		<50% Poverty	51-99% Poverty	100-150% Poverty
Income as % of Poverty (Mean)				
	1992	.298	.737	1.258
	1995	.298	.737	1.244
	1998	.257*+	.770*+	1.254
	2003	.219*+	.771*+	1.245*
	2005	.233*+	.764*+	1.240*
Worker in the household				
	1992	0.264	0.554	0.829
	1995	0.248	0.572	0.858*
	1998	0.342*+	0.667*+	0.888*
	2003	0.301	0.748*+	0.885*
	2005	0.414*+	0.698*+	0.877*
Education <High School Grad				
	1992	0.324	0.301	0.165
	1995	0.297	0.294	0.184
	1998	0.333	0.251*	0.178
	2003	0.286	0.236*	0.156
	2005	0.188*+	0.184*+	0.134
Single Female Head				
	1992	0.655	0.515	0.329
	1995	0.696	0.494	0.351
	1998	0.621+	0.480	0.356
	2003	0.615+	0.473*	0.364
	2005	0.563*+	0.496	0.363
Black				
	1992	0.336	0.246	0.173
	1995	0.367	0.217	0.185
	1998	0.310	0.265	0.215
	2003	0.313	0.254	0.185
	2005	0.289	0.241	0.195
Hispanic				
	1992	0.218	0.221	0.166
	1995	0.188	0.267*	0.255*
	1998	0.243	0.256	0.220*
	2003	0.214	0.276*	0.276*
	2005	0.248+	0.289*	0.298*
Head Disabled				
	1992	0.175	0.192	0.139
	1995	0.235*	0.197	0.150
	1998	0.171+	0.185	0.114

	2003	0.177	0.186	0.104*+
	2005	0.171+	0.207	0.147
n		2,907	4,599	5,508

Source: Authors' Analysis of pooled SIPP data

Notes: Estimates adjusted using household-level weights.

significantly different from 1995 estimate at .05 level or greater *

significantly different from 1992 estimate at .05 level or greater +

Table 2: Program Participation of Low-Income Households with Children by Household Income, 1992-2005 (Proportions unless otherwise specified)

		<50% Poverty	51-99% Poverty	100-150% Poverty
AFDC/TANF receipt				
	1992	0.551	0.365	0.106
	1995	0.543	0.357	0.159*
	1998	0.328*+	0.221*+	0.087+
	2003	0.168*+	0.112*+	0.045*+
	2005	0.151*+	0.133*+	0.055*+
SNAP receipt				
	1992	0.748	0.605	0.212
	1995	0.762	0.615	0.249
	1998	0.544*+	0.445*+	0.200+
	2003	0.570*+	0.433*+	0.223
	2005	0.588*+	0.514*+	0.253
Refundable Federal Tax Credit 2005\$ (Mean)				
	1992	\$271	\$896	\$383
	1995	441*	1792*	1044*
	1998	808*+	2491*+	1714*+
	2003	787*+	3005*+	2884*+
	2005	863*+	3020*+	3015*+
Supplemental Security Income				
	1992	0.060	0.129	0.059
	1995	0.068	0.161	0.077
	1998	0.051	0.129	0.069
	2003	0.055	0.120+	0.055
	2005	0.054	0.132	0.076
Housing Subsidy				
	1992	0.332	0.169	0.081
	1995	0.363	0.200	0.085
	1998	0.269+	0.188	0.103
	2003	0.265*+	0.161	0.070
	2005	0.290	0.179	0.097
n		2,907	4,599	5,508

Source: Authors' Analysis of pooled SIPP data

Notes: Estimates adjusted using household-level weights.

significantly different from 1995 estimate at .05 level or greater *

significantly different from 1992 estimate at .05 level or greater +

Table 3: Material Hardships of Low-Income Households with Children by Household Income, 1992-2005 (Proportions)

	<50% Poverty	51-99% Poverty	100-<150% Poverty
Difficulty Meeting Essential Expenses			
1992	.452	.419	.379
1995	.371	.384	.244*+
1998	.406	.398	.328*+
2003	.384*	.385	.283*
2005	.483+	.404	.303*+
Fell behind on Rent/Mortgage			
1992	.270	.267	.226
1995	.220	.211	.170*
1998	.185*	.199*	.137*
2003	.194*	.187*	.148*
2005	.244	.209*	.143*
Fell behind on Utility Bills			
1992	.346	.337	.292
1995	.303	.322	.216*
1998	.323	.290*	.245*
2003	.307	.307	.211*
2005	.381+	.297	.239*

Source: Authors' Analysis of pooled SIPP data

Notes: Estimates adjusted using household-level weights.

significantly different from 1995 estimate at .05 level or greater *

significantly different from 1992 estimate at .05 level or greater +

Table 4: Difference-in-Differences Results: Material Hardship of Low-Income Households with Children (LP Models)

	Diff Meeting Essen Expenses	Fell Behind on Rent/Mortgage	Fell Behind on Utility Costs
Less than 50% of poverty			
Below 50% Poverty (1992)	0.041 (0.025)	0.0452* (0.023)	0.0159 (0.028)
Below 50% Poverty *1995	0.009 (0.057)	-0.042 (0.045)	0.008 (0.043)
Below 50% Poverty *1998	0.005 (0.030)	-0.021 (0.038)	0.020 (0.033)
Below 50% Poverty *2003	0.001 (0.035)	-0.017 (0.029)	0.028 (0.038)
Below 50% Poverty *2005	0.0744** (0.036)	0.016 (0.030)	0.0825** (0.034)
50-99% of poverty			
51-99% Poverty (1992)	0.028 (0.020)	0.0551*** (0.019)	0.0307* (0.017)
51-99% Poverty *1995	0.0766** (0.035)	-0.024 (0.029)	0.042 (0.025)
51-99% Poverty *1998	0.022 (0.027)	-0.004 (0.024)	-0.004 (0.020)
51-99% Poverty *2003	0.041 (0.028)	-0.022 (0.027)	0.037 (0.028)
51-99% Poverty *2005	0.037 (0.025)	-0.006 (0.025)	0.011 (0.020)
Worker in household	-0.0377** (0.015)	-0.0184* (0.009)	-0.0320** (0.012)
<i>1992</i>	---	---	---
1995	-0.0833*** (0.023)	-0.020 (0.022)	-0.0447* (0.023)
1998	0.011 (0.027)	-0.039 (0.026)	-0.008 (0.026)
2003	-0.0538** (0.025)	-0.0546*** (0.017)	-0.0549** (0.026)
2005	-0.019 (0.026)	-0.040 (0.024)	-0.030 (0.024)
<i>White, Non-Hispanic</i>	---	---	---
Black	0.007 (0.014)	0.001 (0.011)	0.028 (0.017)
Hispanic	-0.030 (0.020)	0.001 (0.011)	-0.017 (0.014)
Race Other	-0.0774** (0.030)	-0.032 (0.020)	-0.0557* (0.028)
Number of children	0.0129*** (0.004)	0.00565** (0.002)	0.0144*** (0.003)
Single female head	0.0794*** (0.010)	0.0288*** (0.007)	0.0702*** (0.012)
Head disabled	0.143***	0.0821***	0.110***

	(0.014)	(0.012)	(0.012)
<i>Age <25</i>	---	---	---
<i>Age25to34</i>	0.0293*	0.0226*	0.013
	(0.016)	(0.013)	(0.017)
<i>Age 35to44</i>	-0.001	-0.009	-0.023
	(0.019)	(0.016)	(0.019)
<i>Age45to54</i>	-0.006	-0.012	-0.031
	(0.020)	(0.017)	(0.022)
<i>Age55to64</i>	-0.0972***	-0.0968***	-0.0886***
	(0.025)	(0.018)	(0.025)
<i>Age 65 and up</i>	-0.128***	-0.111***	-0.110***
	(0.023)	(0.017)	(0.028)
<i>Highest Household Education</i>			
<i>High school graduate</i>	0.003	0.007	0.012
	(0.013)	(0.009)	(0.011)
<i>Some college</i>	0.012	0.009	0.015
	(0.018)	(0.010)	(0.013)
<i>Metropolitan Resident</i>	0.011	0.018	0.0259**
	(0.011)	(0.012)	(0.011)
<i>Unemployment rate</i>	0.0204***	0.0127**	0.0129**
	(0.005)	(0.006)	(0.005)
<i>Waiver implemented</i>	-0.003	0.002	0.005
	(0.021)	(0.020)	(0.019)
<i>R-Squared</i>	0.05	0.03	0.05

Source: Authors' Analysis of pooled SIPP data

Notes: Sample restricted to households with children with incomes \leq 150% of Poverty. Robust standard errors in parentheses clustered by state. Estimates adjusted using household-level weights. All models include state-of-residence controls

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

References

- Acs, G., Loprest, P., & Roberts, R. (2001). Final synthesis report of findings from ASPE's 'leavers' grants. Washington, DC: Urban Institute. Available at: www.urban.org/publications/410809.html
- Ai, C. & Norton, E.C. (2003). Interaction terms in logit and probit models. *Economic letters*, 80(1), 123-129.
- Allard, S.W. & Roth, B. (2010). Strained suburbs: The social service challenges of rising poverty. The Brookings Institution, Metropolitan Opportunity Services Number 9. Available at: http://www.brookings.edu/reports/2010/1007_suburban_poverty_allard_roth.aspx.
- Allard, S.W. (2009). Mismatches and unmet needs: Access to social services in urban and rural America. In *Welfare reform and its long-term consequence for America's poor* (Ed. J.P. Ziliak). Cambridge, UK: Cambridge University Press.
- Barth, R.P., Wildfire, J., & Green, R.L. (2006). Placement into foster care and the interplay of urbanicity, Child behavior problems, and poverty. *American Journal of Orthopsychiatry*, 76(3), 358-66.
- Bauman, K.J. (2002). Welfare, work and material hardship in single parent and other households. *Journal of Poverty*, 6(1), 21-40.
- Ben-Shalom, Y., Moffit, R., & Scholz, J.K. (forthcoming). An assessment of the effectiveness of anti-poverty programs in the United States. In *Oxford Handbook of Economics of Poverty*, P. Jefferson, ed. New York: Oxford University Press. Currently available as NBER working paper No. w17042, available at: <http://www.nber.org/papers/w17042>.
- Beverly, S.G. (2001). Material hardship in the United States: Evidence from the Survey of Income and Program Participation. *Social Work Research*, 25, 143-151.
- Blank, R. (2002). Evaluating welfare reform in the United States. *Journal of Economic Literature*, 40(4), 1105-1166.
- Blank, R., & Schoeni, R. (2003). Changes in the distribution of child well-being over the 1990s. *American Economic Review: Papers and proceedings*, 93(2), 304-308.
- Blank, R., & B. Kovak. (2009). The Growing Problem of Disconnected Single Mothers. In *Making the Work-Based Safety Net Work Better*, Carolyn J. Heinrich and John Karl Scholz, eds. New York: Russell Sage Press. 2009.
- Cancian, M., Haveman, R., Meyer, D.R., & Wolfe, B. (2002). Before and after TANF: The economic Well-being of women leaving welfare. *Social Service Review*, 76(4), 603-641.
- Cancian, M., & Meyer, D.R., (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, M., Noyes, J.L., & Ybarra, M. (Forthcoming). The extended TANF application period and applicant outcomes: Evidence from Wisconsin. *Social Work Research*.

- Corcoran, M.E., Heflin, C.M., & Siefert, K. (1999). Food insufficiency and material hardship in post-TANF welfare families. *Ohio State Law Journal*, 60(4), 1395-1422.
- Czajka, J.L., & Denmead, G. (2008). "Income Data for Policy Analysis: A Comparative Assessment of Eight Surveys. Final Report." Report by Mathematica Policy Research, Inc. under contract to the Department of Health and Human Services, ASPE. Available at: www.mathematica-mpr.com/publications/PDFs/incomedata.pdf.
- Danielson, C., & Klerman, J.A. (2008). Did welfare reform cause the caseload decline? *Social Service Review*, 82(4), 703-730.
- Danziger, S., Heflin, C.M., Corcoran, M.E., Oltmans, E., & Wang, H.C. (2002). Does it pay to move from welfare to work? *Journal of Policy Analysis and Management*. 21(4), 671-692.
- Danziger, S. K., Kalil, A. and Anderson, N. J. (2000). Human Capital, Physical Health, and Mental Health of Welfare Recipients: Co-occurrence and Correlates. *Journal of Social Issues*, 56, 635–654.
- Danziger, S.K., & Seefeldt, K.S. (2003). Barriers to Employment and the 'Hard to Serve': Implications for Services, Sanctions and Time Limits. *Social Policy and Society*, 2, 151-160.
- Eamon, M.K., & Wu, C.F. (2011). Effects of unemployment and underemployment on material hardship in single-mother families. *Children and Youth Services Review*, 33(2), 233-241.
- Heflin, C., Sandberg, J., & Rafail, P. (2009). The structure of material hardship in U.S. households: An examination of the coherence behind common measures of well-being. *Social Problems*, 56(4), 746-764.
- Henly, J.R., Danziger, S.K., & Offer, S. (2005). The contribution of social support to the material well-being of low-income families. *Journal of Marriage and Family*, 67(1), 122-140.
- Jayakody, R., Danziger, S., & Pollack, H. (2000). Welfare reform, substance abuse, and mental health. *Journal of Health Politics, Policy and Law*, 25(4), 623-652.
- Johnson, R., & Corcoran, M.E. (2003). The road to economic self-sufficiency: Job quality and job transition patterns after welfare reform. *Journal of Policy Analysis and Management*, 22(4), 615-639.
- Kalil, A., Seefeldt, K.S., & Weng, H.W. (2002). Sanctions and material hardship under TANF. *Social Service Review*, 76(4), 642-662.
- Loprest, P. (2001). How are families that left welfare doing? A comparison of early and recent Welfare leavers. *New Federalism: National Survey of America's Families*, Series B, No. B-36. Urban Institute. Available at www.urban.org/url.cfm?ID=310282&renderforprint=1
- Lovell, V., & Oh, G. (2005). Women's job loss and material hardship. *Journal of Women, Politics, & Policy*, 27(3-4), 169-183.
- Mayer, S.E. & Jencks, C. (1989). Poverty and the distribution of material hardship. *The Journal of human resources*, 24(1), 88-114.

- Meyer, B.D., Mok, W.K.C., & Sullivan, J.X. (2009). *The under-reporting of transfers in household surveys: Its nature and consequences*, National Bureau of Economic Research Working Paper No. 15181.
- Meyer, B.D., & Sullivan, J.X. (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(7-8), 1387-1420.
- Pavetti, L.A., & Acs, G. (2001). Moving up, moving out, or going nowhere? A study of the employment patterns of young women and the implications for welfare mothers. *Journal of Policy Analysis and Management*, 20(4), 721-736.
- Reichman, N.E., Teitler, J.O., & Curtis, M.A. (2005). TANF sanctioning and hardship. *Social Service Review*, 79(2), 215-236.
- Schmidt, L., & Danziger, S. (2010). The Supplemental Security Income Program and material hardship after the 1996 welfare reform. CLOSUP Working Paper Series Number 26. Downloaded from: <http://closup.umich.edu/files/closup-wp-26-schmidt-danziger-SSI-program.pdf>.
- Shaefer, H.L. & Wu, L. (2011). Unemployment Insurance and Low-Educated, Single, Working Mothers before and after Welfare Reform. *Social Service Review*, 85(2), 205-228.
- Slack, K.S., Magnuson, K.A., Berger, L.M., Yoo, J.P., Coley, R., Dunifon, R., Dworsky, A., Kalil, A., Knab, J., Lohman, B.J., Osborne, C. (2007). Family economic well-being following the 1996 welfare reform: Trend data from five non-experimental panel studies. *Children and Youth Services Review*, 29(6), 698-720.
- Sullivan, J.X., Turner, L. & Danziger, S.H. (2008). The relationship between income and material hardship, *Journal of policy analysis and management*, 27(1), 63-81.
- U.S. Department of Health and Human Services, (2004). Measures of material hardship, Final report. Washington DC. Available at: aspe.hhs.gov/hsp/material-hardship04/index.htm.
- Wu, C.F., Cancian, M., & Meyer, D.R. (2008). Standing still or moving up? Evidence from Wisconsin on the long-term employment and earnings of TANF participants. *Social Work Research*, 32(2), 89-103.
- Wu, C.F., Cancian, M., Meyer, D.R., & Wallace, G.L. (2006). How do welfare sanctions work? *Social Work Research*, 30(2), 33-52.
- Wu, C.F., & Eamon, M.K. (2010). Does receipt of public benefits reduce material hardship in low-income families with children? *Children and Youth Services Review*, 32(10), 1262.