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Extreme Poverty in the United States, 1996 to 2011

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Introduction

Recently, there has been considerable discussion in the news media and by presidential candidates about the fact that nearly half of American households receive government benefits[2]. However, a recent study suggests that a declining proportion of these benefits go to the poor[3], and what does go to the poor is more often in the form of in-kind benefits than cash.

In fact the 1996 welfare reform ended the only cash entitlement program in the U.S. for poor families with children, replacing it with a program that offers time-limited cash assistance and requires able-bodied recipients to participate in work activities. This reform, combined with changes to other means-tested public programs that have raised the benefits of work for low-income households, has been followed by a dramatic decline in cash assistance caseloads, from an average of 12.3 million recipients per month in 1996 to 4.4 million in June 2011; only 1.1 million of these beneficiaries are adults.

Thus, in the aftermath of the Great Recession while millions of American parents continue to experience long spells of unemployment, they have little access to means-tested income support programs. Has this produced a new group of American poor: households with children living on virtually no income?

We use the term "extreme poor" to refer to this group, and adapt one of the World Bank's measures of global poverty to define it: $2 or less, per person, per day. This policy brief estimates the prevalence of extreme poverty in the U.S., and assesses how it has changed over the past 15 years. As a result of shrinking access to cash assistance and the increasingly poor economic climate, we expect the size of the population of households with children living in extreme poverty to increase between 1996 and 2011, both in terms of total households, and as a proportion of all poor households.

While cash assistance has become less accessible over this period, some in-kind benefits have become more accessible. Most important is the Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp Program[4]. Over the 2000s many states relaxed their eligibility requirements for SNAP. As a result of this—combined with the increase in need caused by the Great Recession—SNAP participation has increased from

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2. Binyamin Appelbaum and Robert Gebeloff (February 11, 2012). "Even Critics of the Safety Net Increasingly Depend on It." *The New York Times*; Sara Murray (October 5, 2011). "Nearly Half of U.S. Lives in Household Receiving Government Benefit." *Wall Street Journal* Blog: Real Time Economics; Rachel Weiner (February 1, 2012). "Romney, citing safety net, says he's 'not concerned about the very poor'." *The Washington Post*.
3. See Sherman, Greenstein & Ruffing (2012).
4. Another example of in-kind benefits expansion is the increased accessibility of public health insurance for low-income children and in some states their parents, most notably through passage of the State Children's Health Insurance Program (SCHIP) in 1997.

an average of 25.5 million recipients per month in 1996 to 45.2 million in June 2011. Further, in 2009 the American Recovery and Reinvestment Act (ARRA) temporarily increased SNAP benefits by about 15 percent per recipient household. Thus, we expect the expansion of in-kind programs in recent years—particularly SNAP—to mitigate the effects of the increase in extreme poverty among non-elderly households with children.

Data and Method

First, we examine changes between 1996 and 2011 in the number of households with children who are in extreme poverty—living at $2 or less in income per person per day—in a given month. We draw data from the Survey of Income and Program Participation (SIPP), collected by the U.S. Census Bureau. SIPP interviews are conducted every four months about each individual in sample households, gathering monthly data on demographics, income, and public program participation.[5]

Our study period starts in 1996, before states were required to implement the 1996 welfare reform, and before the national unemployment rate fell to a low of 4.0 percent in 2000. The period ends with the most recent available SIPP data, from the beginning of 2011, when the national unemployment rate was roughly 9 percent.

We use household-level monthly income variables (rather than families or sub-families) as the unit of analysis because households include all individuals who live in a single housing unit, thus providing a conservative measure of the incidence of extreme poverty.[6] We restrict our sample to households with children under 18 and with household heads under 65, whose household incomes fall at or below the SIPP's household-specific monthly poverty thresholds, assigned by the U.S. Census Bureau.[7] We adjust all values to 2011 dollars using the Consumer Price Index for urban customers. We utilize household-level sample weights in the SIPP to produce nationally-representative estimates.

To examine the incidence of extreme poverty, we develop a definition based on one of the World Bank's main indicators of global poverty, meant to measure poverty in developing nations.[8] Our definition considers households to be in extreme poverty if they report $2 dollars or less per person, per day in total household income in a given month (approximated as $60 per person, per month in 2011 dollars).[9] The SIPP income measure we use includes labor market earnings, pension and retirements, cash income from public programs (but not in-kind transfers), asset income (dividends, interest and rents) and reported income from friends and family members outside the household (including child support), and from informal sources. We report an additional set of estimates that include benefits from the Supplemental Nutrition Assistance Program (SNAP, formerly the Food Stamp Program) as equivalent to cash income.

Figure 1 plots the number of households with children living in extreme poverty between 1996 and 2011. Breaks in the trend lines represent breaks between SIPP panels. We estimate that the number of households living on $2 or less in income per person, per day in a given month increased from about 636,000 in 1996 to about 1.46 million households in early 2011, a percentage growth of 130 percent. We estimate that about 2.8 million children lived in extreme poverty at the beginning of 2011 (see Table 1). This was roughly 16 percent of all children in poverty.

Figure 1 also shows that counting SNAP benefits as income reduces—but does not eliminate—this rise in extreme poverty. With SNAP included as income, the number of households living on $2 or less per person, per day increases from roughly 475,000 to nearly 800,000 between 1996 and 2011, a percentage growth of 67 percent. When SNAP is considered equivalent to income, about 1.4 million children lived in extreme poverty at the beginning of 2011. SNAP's beneficial effects appear especially notable after expansion of the program as part of the ARRA. As figure 1 demonstrates, the number of households in extreme poverty shot up considerably between late 2008 and early 2011 when only cash income is considered. In contrast, when SNAP benefits are considered as equivalent to cash, the prevalence of extreme poverty remained virtually unchanged during the period after ARRA.

5. There are concerns that survey respondents may under-report income. However, when compared to other large nationally representative surveys designed to measure income and program participation, studies find that the SIPP is generally superior in measuring income among the poor and public program participation (Czajka & Denmead, 2008; Meyer, Mok, & Sullivan, 2008). As administrative earnings data are insufficient for capturing unreported income among the poor, the SIPP is the best possible source of data for this analysis. We keep only SIPP reporting month (4th reference month) observations in each wave, because these are known to be the most accurate (Moore, 2007). As is commonly done, reporting month observations within each wave are stacked to generate cross-sectional estimates.

6. For the SIPP, the U.S. Census Bureau defines a household as all individuals living in the same housing unit, while families and sub-families are defined as people related to each other by blood or marriage. Thus, the household offers a more conservative unit of analysis because it captures income of all individuals living in the same household.

7. We drop observations in which households report negative income values. When looking across the SIPP panels, these tend to be from households with higher incomes in other months, which have income sources other than from earnings.

8. http://data.worldbank.org/indicator/SI.POV.GAP2

9. In Table 1, we also report estimates for extreme poverty using each household's income averaged over a three-month period, which approximates a quarter.

Figure 1. The Number of Households with Children in Extreme Poverty

$2 per person per day
$2 per person per day, with SNAP

Source: Authors' analyses of the 1996 through 2008 Panels of the SIPP. The horizontal axis represents approximate years and months of SIPP 4th reference month estimates. The vertical axis represents households.

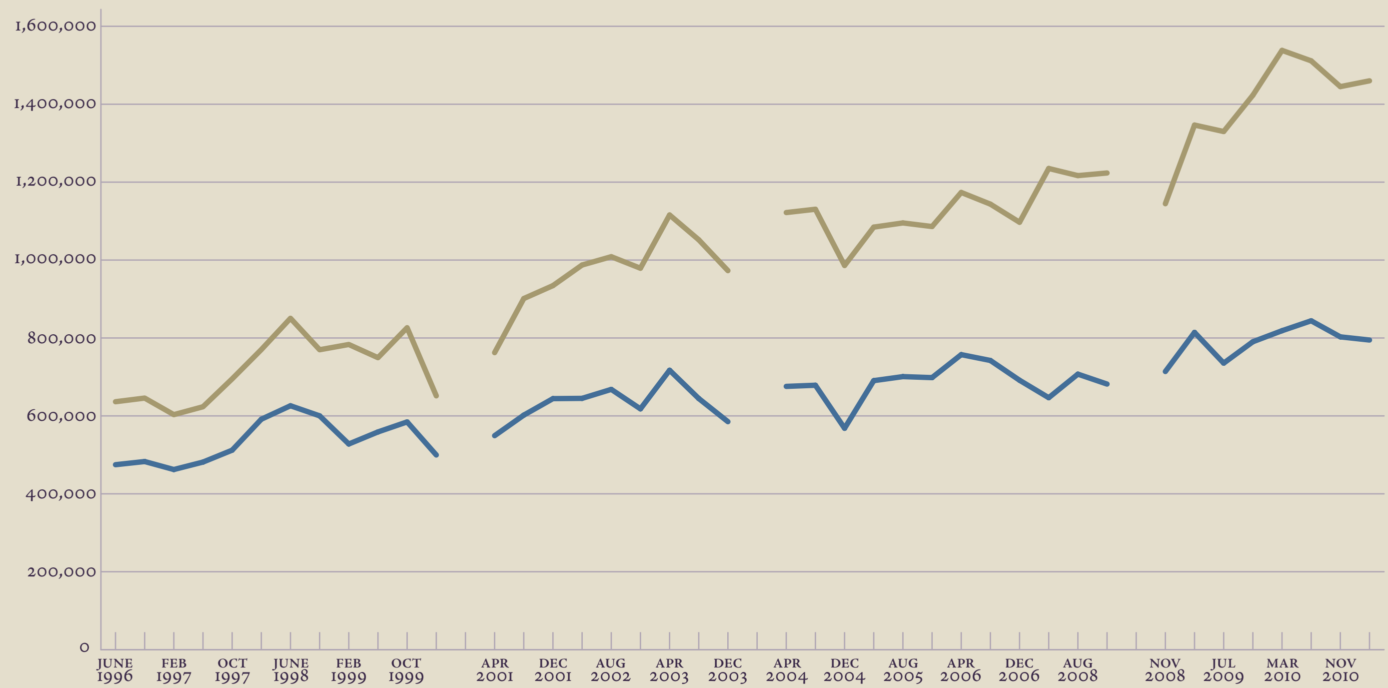

Figure 2. Proportion of Poor Households with Children in Extreme Poverty

$2 per person per day
$2 per person per day, with SNAP

Source: Authors' analyses of the 1996 through 2008 Panels of the SIPP. The horizontal axis represents approximate years and months of SIPP 4th reference month estimates. The vertical axis represents the proportion of poor households.

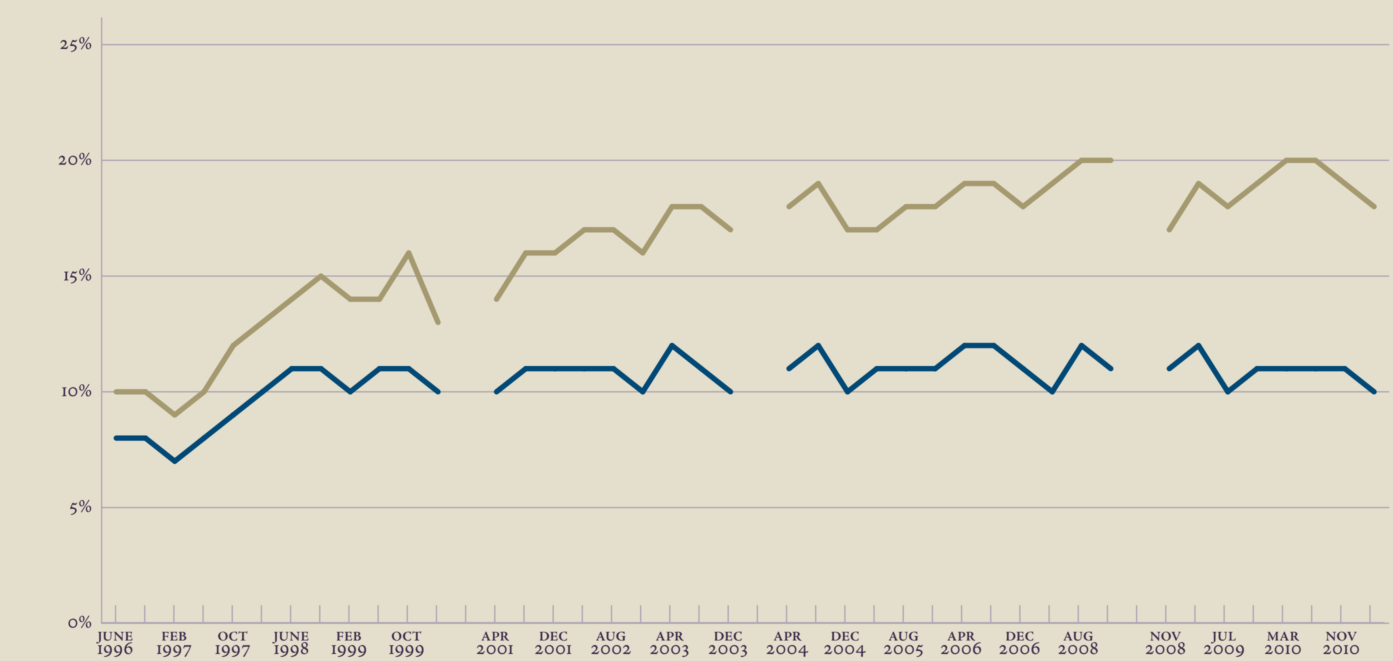

Figure 2 examines the growth of extreme poverty as a proportion of all poor households. Extreme poverty grows steadily as a proportion of all poor households, but this growth is steepest in the late 1990s and early 2000s. In 1996, households in extreme poverty represented about 10 percent of all poor households. Between 1997 and 2000—during a period of low unemployment—this proportion grew from roughly 10 to 15 percent. Between 2001 and 2006, this proportion grew from 15 percent to about 19 percent, and hovered between 18 and 20 percent through 2011.

The second trend line in Figure 2 counts SNAP benefits as income. When SNAP is included, households in extreme poverty rise from about 8 percent of all poor households with children in 1996 to 10 percent in 2011, an increase of 32 percent. The clearest increase occurred in the late 1990s, and the estimates remain relatively stable throughout the 2000s.

Table 1 compares estimates from our baseline definition with estimates that average each household's income over three months rather than just one.[10] Fewer households experience extreme poverty for a calendar quarter compared to a month, however, the percentage growth in extreme poverty over the study period is somewhat greater than with our monthly measure. Approximately 866,000 households were surviving on an average of $2 or less in income per person per day in the first quarter of 2011.

Looking at the characteristics of the households living in extreme poverty, we find that about 37 percent of them in 2011 were headed by a married couple, while 51 percent were headed by a single female.

Table 1: Households in Extreme Poverty in the U.S.

	Number in Extreme Poverty (in thousands)			Percent of all Households in Poverty		
	1996	2011	% growth	1996	2011	% growth
<=$2 Threshold: Monthly	636	1,460	129.6%	10.2%	18.4%	80.4%
with SNAP	475	795	67.4%	7.6%	10.0%	31.6%
<=$2 Threshold: Quarterly	307	866	182.1%	5.4%	12.3%	127.8%
with SNAP	209	407	94.7%	3.7%	5.8%	56.8%
Married households	323	539	66.9%	5.2%	6.7%	28.8%
Single female households	254	738	190.6%	4.1%	9.3%	126.8%
Race of Household Head						
White, Non-Hispanic	334	701	109.9%	5.3%	8.8%	66.0%
African American	127	359	182.7%	2.0%	4.5%	125.0%
Hispanic	138	320	131.9%	2.2%	4.0%	81.8%
Children in households	1,383	2,806	102.8%	N/A	N/A	N/A
with SNAP	935	1,413	51.2%	N/A	N/A	N/A

Source: Authors' Analyses of the 1996 through 2008 Panels of the SIPP

In 2011, about 48 percent of households in extreme poverty were headed by white non-Hispanics, 25 percent by African Americans and 22 percent by Hispanics. Thus, extreme poverty is not limited to households headed by single mothers or disadvantaged minorities, though the percentage growth in extreme poverty over our study period was greatest among these groups.

Beyond SNAP, many households with children in extreme poverty also appear to have access to other in-kind benefits. At the beginning of 2011, roughly one-in-five households in extreme poverty utilized a housing subsidy such as section 8 vouchers or public housing units (comparable to the proportion of all households in poverty). About 66 percent of these households had at least one child covered by public health insurance, somewhat less than the same proportion for all households in poverty. Still, the in-kind safety net is leaving many households with children behind. And even families who receive them will arguably have a hard time coping with no cash on hand.

Conclusion

In sum, we estimate that, as of the beginning of 2011, about 1.46 million U.S. households with about 2.8 million children were surviving on $2 or less in income per person per day in a given month. This constitutes almost 20 percent of all non-elderly households with children living in poverty. About 866,000 households appear to live in extreme poverty across a full calendar quarter. The prevalence of extreme poverty rose sharply between 1996 and 2011. This growth has been concentrated among those groups that were most affected by the 1996 welfare reform. Despite the presence of a substantial in-kind safety net, a significant number of households with children continue to slip through the cracks. And it is unclear how households with no cash income—either from work, government programs, assets, friends, family members, or informal sources—are getting by even if they do manage to claim some form of in-kind benefit.

10. Ideally we would also report annual estimates. Unfortunately, to produce annual estimates, the SIPP requires the use of calendar year weights, which have not yet been made available for the final years of our study period. To provide a more conservative estimate, for our quarterly estimates, we average months across two waves (reference month 3 wave t + reference month 4 wave t + reference month 1 wave t+1). Because of non-random attrition, we do not want to drop cases not present in wave t+1. In those cases we use reference months 2, 3, and 4 of wave t.

While the best source of data available for this study, the SIPP does likely suffer from some under-reporting of income by respondents. However, under-reporting likely does not explain the dramatic increase in extreme poverty over our study period. Further, under-reporting of income itself suggests adverse outcomes, such as engagement in the underground economy (Edin & Lein, 1997). Finally, when SIPP calendar weights become available for the full study period, adding annual estimates of extreme poverty will be an important addition to this analysis.

When we consider SNAP benefits as equivalent to dollars, this reduces the number of extremely poor households with children by about half. We estimate that SNAP currently saves roughly 1.4 million children from extreme poverty. In addition, many of the households in extreme poverty are accessing public health insurance for at least one of their children, and about one in five have a housing subsidy. These in-kind safety-net programs are playing a vital role, and are probably blunting some of the hardship that American children living in extreme poverty would otherwise face. However, it would be wrong to conclude that the U.S. safety net is strong, or even adequate, when one in five poor households with children are living without meaningful cash income.

References

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. Retrieved from the web 11/1/2009, http://www.mathematica-mpr.com/publications/PDFs/incomedata.pdf.

Edin, K. & Lein, L. (1997). *Making ends meet*. New York: Russell Sage Foundation.

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.

Sherman, A., Greenstein, R. & Ruffing, K. (2012). "Contrary to 'Entitlement Society' Rhetoric, Over Nine-Tenths of Entitlement Benefits Go to Elderly, Disabled, or Working Households. Report by the Center on Budget and Policy Priorities. Retrieved from the web 2/16/2012, http://www.cbpp.org/files/2-10-12pov.pdf

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