The Rise of Extreme Poverty in the UNITED STATES

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The number of adults on welfare has dropped dramatically since its reform in 1996. As of 2011, a little over 1 million adults remained on the welfare rolls in a typical month, down from about 4.6 million at the program's peak in the early 1990s. As these numbers plummeted, the number of single mothers joining the workforce or returning to it grew at rates that were largely unexpected. For these reasons, welfare reform has been touted as a success.

At the same time, in the years since 1996, a new group of American poor has emerged: families with children who are living on virtually no income—$2 or less per person per day in a given month. These are America's "extreme poor." The U.S. official poverty line for a family of three would equate to roughly $17 per person per day. What scholars call "deep poverty"—incomes at less than half the poverty line—is about $8.50 per person per day, over four times higher than our cutoff. This new group of American poor, the extreme poor, are likely experiencing a level of destitution not captured in prior poverty measures, one that few of us knew even existed in such a rich country.

The purpose of this article is to expose the rise of extreme poverty and to examine how the safety net is—or is not—addressing it. We cannot fully address *why* extreme poverty is on the rise, but it may well be related to the landmark 1996 welfare reform. After 1996, it became far more difficult to get any cash assistance from the government if you didn't have a job, even if you were raising young children and had no other sources of income.

Measuring Extreme Poverty

To examine trends in the prevalence of extreme poverty in the United States over the past 15 years, we use a unique data source, the Survey of Income and Program Participation (SIPP), collected by the U.S. Census Bureau. While not perfect, this is the best available source of information in the United States about (a) participation in public programs, and (b) family incomes among the poor. We begin in 1996, which is before states were required to implement 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 SIPP data available at the time of analysis, from the middle of 2011, when the national unemployment rate was roughly 9 percent. We include only households with children under 18 and with household heads under 65. We adjust income values to 2011 dollars using the Consumer Price Index for urban customers and use household-level sample weights to produce nationally representative estimates.

We derive three estimates of extreme poverty from these data, using three different definitions of household income. These estimates differ in the extent to which they take into account noncash benefits, ranging from the "baseline" measure that excludes all such benefits to the "full safety net measures" that include them.

Baseline estimates: Our baseline estimates, which most closely align to the official U.S. poverty line and the deep poverty measure described above, use monthly pretax cash income values (which include cash assistance) and take family size into account.[2] We use a comprehensive monthly pretax cash income measure that includes the reported cash resources of all individuals living in a household. It includes wages from work, pension, and retirement benefits; cash benefits from public programs; asset income (dividends, interest, and rents); cash contribution from family and friends (including child support); and cash from informal sources (such as odd jobs). The cash benefits from public programs include such programs as Aid to Families with Dependent Children (AFDC) and Temporary Assistance for Needy Families (TANF), but do not include refundable tax credits, which are "post-tax income" and thus not included in the federal poverty measure.

SNAP estimates: The second measure adds benefits from the Supplemental Nutrition Assistance Program (SNAP), treating them as if they were cash, even though they can be used only at certified vendors for the purchase of food. This allows us to examine how effective the SNAP program has been in addressing the needs of the extreme poor.

Full safety net estimates: The third measure not only treats SNAP as cash, but also adds in the estimated average monthly value of the household's net refundable tax credits, specifically the EITC and the Child Tax Credit, plus government housing subsidies (Housing Choice Vouchers, known as "Section 8" and public housing), which serve about a quarter of the eligible population. This third measure allows us to judge just how successful the U.S. social safety net is, even in this post-welfare era, in addressing the needs of the poorest Americans.

Trends in Extreme Poverty

Are more people in extreme poverty now than 15 years ago? No matter which of the three measures we use, the answer is *yes*.

Figure 1 plots estimates from our baseline measure in red. It plots the number of households with non-elderly heads and minor children living in extreme poverty between 1996 and 2011.[3] The breaks in the lines represent breaks between SIPP panels. This figure shows that the number of households living on $2 or less in cash income per person per day in a given month increased from about 636,000 in 1996 to about 1.65 million in mid-2011, a growth of 159.1 percent. In mid-2011 about 3.55 million children lived in extreme poverty in a given month (see Table 2).[4]

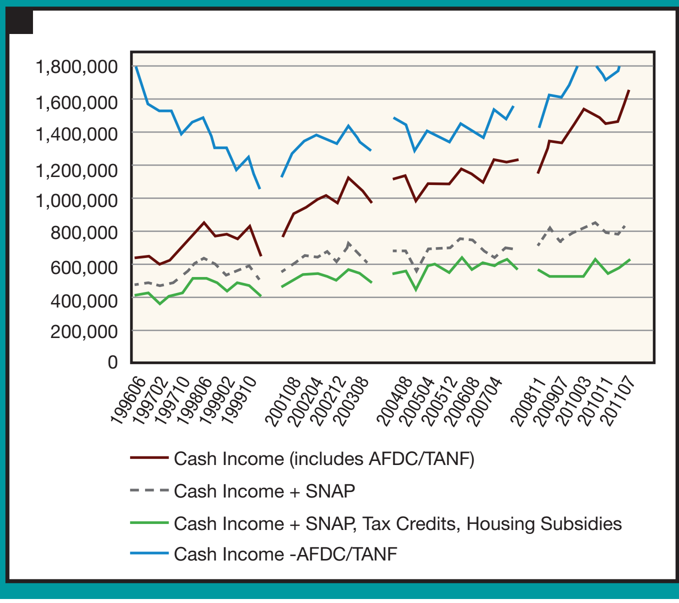
This rise in extreme poverty is reduced—but not eliminated—when we count SNAP as cash (gray dashed line). By that measure, the number of extreme-poor households increases by 80.4 percent, from roughly 475,000 to 857,000. When tax credits and housing subsidies are included as well (green line), thus generating our most conservative measure of extreme poverty, the increase is still about 50 percent, from 409,000 to 613,000 households. It follows that 1.17 million children were in extreme poverty in mid-2011 under our most conservative measure (see Table 2).[5]

The bottom line is that extreme poverty has grown sharply since welfare reform. And though means-tested public programs have done much to stem the tide, growth in extreme poverty is still substantial even after accounting for major federal means-tested transfers. The beneficial effects of these programs are especially evident after the passage of the American Recovery and Reinvestment Act (ARRA), which expanded both SNAP and refundable tax credits. As Figure 1 demonstrates, "baseline" extreme poverty, measured using only cash income (including TANF, but excluding SNAP, housing subsidies, and tax credits), increased by about 35 percent between late 2007 and early 2011. But when SNAP, tax credits, and housing subsidies are added, the rise in extreme poverty was less than 10 percent over this period. In fact, it fell slightly in some months.

The blue trend line presented in Figure 1 reveals how much extreme poverty there would likely have been in the absence of AFDC or TANF (and assuming no behavioral response). It subtracts income from cash assistance provided through AFDC/TANF from the baseline cash-income estimate. By comparing this line with the "cash only" line, we can examine how effective cash assistance has been in lifting households out of extreme poverty.

The results show a stark decline in the role of cash assistance in reducing extreme poverty. In 1996, cash assistance had a substantial effect, bringing the incomes of 1.15 million households above the extreme poverty threshold. But throughout the 1990s, the impact of cash assistance in reducing extreme poverty declined substantially and flattened out in the early 2000s. By

FIGURE 1: Households with Children in Extreme Poverty in the United States (<=$2 per person, per day)



Source: Authors' analyses of the 1996 through 2008 panels of the SIPP. The horizontal axis represents approximate years and months of SIPP fourth reference month estimates. The vertical axis represents the number of non-elderly households with children. Breaks in the trend lines represent breaks in the SIPP panels.

TABLE 1. **Alternative Estimates of Extreme Poverty of Households with Children**

	Number of Households with Children (Rounded in Thousands)			Percent of Households with Children		
	1996	2011	% Growth	1996	2011	% Growth
Monthly estimates (based on Figure 1)						
Pretax cash only	636,000	1,648,000	159.1%	1.7%	4.3%	151.8%
Add SNAP	475,000	857,000	80.4%	1.3%	2.2%	69.2%
Add SNAP, tax credits, housing subsidies	409,000	613,000	49.9%	1.1%	1.6%	45.5%
Quarterly estimates						
Pretax cash only	307,000	1,039,000	238.4%	0.8%	2.7%	237.5%
Add SNAP	209,000	478,000	128.7%	0.6%	1.2%	100.0%
Add SNAP, tax credits, housing subsidies	189,000	373,000	97.4%	0.5%	1.0%	100.0%
1 or more months per quarter (cash only)	1,295,000	2,407,000	85.9%	3.5%	6.3%	80.0%

Source: Authors' analyses of the 1996 and 2008 panels of the SIPP. For the full tables, see Shaefer & Edin, 2013

mid-2011, cash assistance was lifting only about 300,000 families out of extreme poverty. Indeed, when cash assistance is subtracted from household income, extreme poverty in 1996 and 2011 would have been about the same.

The exposure of children to extreme poverty has grown dramatically even when longer, rather than shorter, spells are considered. In Table 1, the starting and ending points for the monthly estimates reported in Figure 1 are provided, as well as alternative estimates using quarterly income. Compared with the baseline monthly measure, we find that, for a calendar quarter, fewer households experience extreme poverty. When comparing the *growth* in extreme poverty, however, the results based on quarterly income are consistent with the monthly estimates. After adding in the estimated cash value of all means-tested programs, and using our monthly measure, the growth in the number of households experiencing extreme poverty was 49.9 percent. In contrast, using quarterly income, that figure was 97.4 percent. Although these higher growth rates are a function of lower starting values in 1996, it is clear that, even when using quarterly income, there is reason for concern.

The bottom row of Table 1 reports a final specification for our baseline definition—the measure that uses cash income only. The number of households with children who reported at least one month of extreme poverty over a calendar quarter increased from about 1.30 million in 1996 to 2.41 million households in mid-2011. This represents 6.3 percent of all households with children in mid-2011.

Which Groups Are Most Vulnerable?

It is important to consider whether the risk of extreme poverty is borne by groups that, in the United States, have historically been disadvantaged. In Table 2, we report the characteristics of the households living in extreme poverty, first using the baseline cash-income-only measure, and then adding in the estimated cash value of other means-tested programs. Because different groups may vary in the extent to which they underreport on program participation and income, these particular estimates should be treated with caution. They do, however, provide insights into which groups may have been most affected by the rise in extreme poverty, and whether these findings are consistent with the possibility that at least part of this rise is related to changes stemming from the 1996 welfare reform.

We begin with the association between marital status and extreme poverty. Using the baseline measure for 2011, about 37 percent of the households in extreme poverty were headed by a married couple, and 51 percent were headed by a single female. After adding in SNAP, tax credits, and housing subsidies, just over half of the extreme poverty households are married, and less than one-third are single female–headed, reflecting greater reliance on public programs among households headed by single mothers than by married couples.

What about the association between race and ethnicity and extreme poverty? In mid-2011, the baseline measure shows that about 47 percent of households in extreme poverty were headed by white non-Hispanics, while 46 percent were headed by African Americans or Hispanics (reported together because of small sample sizes). After adding in the other programs, the proportion headed by white non-Hispanics increases to about 61 percent.

The takeaway from these estimates is that extreme poverty is not limited to households headed by single mothers or disadvantaged minorities. But it is also clear that the percentage growth in extreme poverty over the 15-year study period was greatest among these more vulnerable groups, those who were most likely to have been impacted by the 1996 welfare reform. The percentage growth in extreme poverty for households headed by single females was 230 percent, counting only cash from work and welfare, and 68 percent after adjusting for other programs. Racial minorities experienced a larger growth in extreme poverty under the cash-only definition, although they may have been buffered better than non-Hispanic whites by the major means-tested programs, such as SNAP and housing subsidies.

TABLE 2. Characteristics of Households with Children in Extreme Poverty

Number in Extreme Poverty, Monthly	Cash Only			Adding in SNAP, Tax Credits, and Housing Subsidies		
	1996	2011	% Growth	1996	2011	% Growth
Total households	636,000	1,648,000	159.1%	409,000	613,000	49.9%
Married households	323,000	602,000	86.4%	255,000	330,000	29.4%
Single female households	254,000	838,000	229.9%	112,000	188,000	67.9%
Race of household head						
White, Non-Hispanic	334,000	782,000	134.1%	243,000	375,000	54.3%
African American & Hispanic	265,000	758,000	186.0%	130,000	182,000	40.0%
Children	1,383,000	3,547,000	156.5%	788,000	1,166,000	48.0%

Source: Authors' analyses of the 1996 and 2008 panels of the SIPP. For the full tables, see Shaefer & Edin, 2013

Why the Rise of Extreme Poverty Matters

The prevalence of extreme poverty in the United States may shock many. As of mid-2011, our analyses show that about 1.65 million households with about 3.55 million children were surviving on $2 or less in cash income per person per day in a given month. These estimates account for income received from TANF and other direct cash income transfer programs, plus contributions from family and friends and income from odd jobs, among other things. Households in extreme poverty constituted 4.3 percent of all non-elderly households with children.

Worse yet, the prevalence of extreme poverty rose sharply between 1996 and 2011, with the highest growth rates found among groups most affected by the 1996 welfare reform. When income over the quarter is used, rather than income from a single month, the proportional increase in extreme poverty over the study period is comparable to the monthly estimates (and in some cases, is larger), although the overall incidence is lower.

The safety net is succeeding in reducing the most extreme forms of deprivation. Yet by no means does it eliminate extreme poverty. When we recalculate the mid-2011 figures after treating SNAP benefits as equivalent to cash, this reduces the number of extremely poor households with children by about half (48 percent), and when refundable tax credits and housing subsidies are subsequently added, the number falls by 63 percent. We estimate that these major means-tested aid programs currently save roughly 2.38 million children from extreme poverty each month, but they leave 1.17 million children behind.

The simple but important conclusion is that a growing population of children experience spells with virtually no income. How are they getting by—if they are—and what are the human costs of subsisting on $2 a day or less? On the basis of the results presented here, we of course cannot know what types of survival strategies are being used. It would be useful to carry out research that would cast light on these strategies, their human costs, and on policies that might more fully address the plight of the extreme poor.

The skeptic might reasonably suggest that—before turning to the policy response—we need to know whether we can trust the results. It is possible that, insofar as SIPP respondents have underreported their income, our estimates are biased. Although we cannot rule out this possibility, the SIPP is the best possible source of available data we currently have for this investigation. It would not be appropriate to use administrative earnings records, since these undercount income earned "off the books," which is common among the poor. The SIPP, in fact, records more income among the poor than any other major household survey. As for public program reporting rates, the SIPP does well relative to other major surveys, and SIPP reporting rates for most public programs have not fallen over our study period in a way that would explain the dramatic and steady increase in extreme poverty reported here. In fact, a sensitivity analysis confirms that rising rates of imputation (which are partially responsible for underreporting) over the course of each panel cannot explain the upward trend in extreme poverty over time.

Still further, our estimates were initially motivated by Edin's qualitative work at field sites across the country, through which she has increasingly interacted with families who were surviving on no cash income since welfare reform. Since the release of this SIPP research, Edin and Shaefer have been engaging in ethnographic research across four field sites in three regions, interacting with many individual who would fit the $2-a-day profile if they were SIPP respondents. Thus, the key findings of this investigation have been substantiated, to the extent possible thus far, through both quantitative and qualitative means, with each line of inquiry informing the other.

Finally, it is worth noting that underreporting of income itself suggests adverse outcomes, such as engagement in the underground economy. For example, in Edin and Lein's study *Making Ends Meet* (1997), which was conducted in four cities just prior to welfare reform, many welfare recipients were forced to work off the books to survive. Eight percent reported work that was illegal in and of itself (not just because it went unreported to welfare caseworkers and the IRS), with the most common such work involving selling sex.

The descriptive analyses presented here cannot, then, speak definitively to the causal mechanisms that have led to such a sharp uptick in extreme poverty in the United States. One possibility is that the virtual disappearance of a cash safety net for non-workers has played an important role, combined with overall slow economic growth during the 2000s, culminating in the major job losses of the Great Recession.

Although our results are troubling by most any calculus, we ought not overlook the silver lining. It is clear that, especially in the aftermath of the Great Recession, our current major safety-net programs are blunting some of the hardship that the very-bottom households would otherwise face. However, it would be wrong to conclude that the U.S. safety net is strong or even adequate, as the number and proportion of households with children surviving on less than $2 per day has risen so dramatically over the past 15 years, even after accounting for all sources of income, plus means-tested transfers. ■

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Key Resources

Ben-Shalom, Y., Moffit, R., & Scholz, J. K. (in press). An assessment of the effectiveness of anti-poverty programs in the United States. In P. Jefferson (Ed.), *Oxford handbook of economics of poverty*. New York: Oxford University Press. Currently available as NBER working paper No. w17042, http://www.nber.org/papers/w17042.

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. http://www.mathematica-mpr.com/publications/PDFs/incomedata.pdf.

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

Loprest, P. J. (November 2011). Disconnected families and TANF. Urban Institute, OPRE research brief, #02.

Meyer, B. D., Mok, W. K. C., & Sullivan, J. X. (2009). *The under-reporting of transfers in household surveys: Its nature and consequences* (NBER working paper 15181). http://www.nber.org/papers/w15181.

Ravallion, M., Chen, S., & Sangraula, P. (2008). Dollar a day revisited. The World Bank Development Research Group Policy Research Working Paper 4620. http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2008/09/02/000158349_20080902095754/Rendered/PDF/wps4620.pdf.

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. http://www.cbpp.org/files/2-10-12pov.pdf.

Shaefer, H.L. & Edin, K. (2013). "Rising Extreme Poverty in the United States and the Response of Federal Means-Tested Transfers." *Social Service Review*, 87(2), 250–268.

Endnotes

1. This article draws heavily on Shaefer & Edin, 2013.

2. Ideally, we would also report annual estimates. Unfortunately, to produce annual estimates, the SIPP requires the use of calendar year weights, which, at the time of analysis, had not yet been made available for the final year of our study period, nor are they available for other years in the study period because of breaks between SIPP panels. The virtue of monthly estimates is that they better protect against biasing from non-random attrition throughout the SIPP panels. Still, this is an important limitation of our analysis, as it is possible that households could experience a month or even a calendar quarter in extreme poverty, but have larger incomes over a full year.

3. A second figure, which appears in Shaefer & Edin (2013), examines the proportion of all non-elderly households with children in extreme poverty. The results in that figure are consistent with those presented here.

4. Readers should note that all estimates come from a household survey and thus fluctuate somewhat from month to month, as is shown in Figures 1 and 2. Therefore, the exact point estimates should be treated with caution. Of more interest are the trends over time, which are quite clear, substantial, and robust to numerous sensitivity tests.

5. Virtually all of the difference between the SNAP-only trend line and the final trend line is attributable to refundable tax credits.