Understanding the Dynamics of \$2-a-Day Poverty in the United States



H. LUKE SHAEFER, KATHRYN EDIN, AND ELIZABETH TALBERT

Shaefer and Edin (2013) have found a large rise in "extreme poverty"—defined as cash income of no more than \$2 per person per day, for a month or calendar quarter—among U.S. households with children between 1996 and 2011. This article explores some underlying dynamics of this phenomenon, referred to here as "\$2-a-day poverty," presenting evidence from both qualitative fieldwork and quantitative analysis of the Survey of Income and Program Participation (SIPP). The rise in \$2-a-day poverty has been concentrated among children experiencing it chronically—that is, for seven or more months during a calendar year. Both qualitative and quantitative evidence find that a large majority of children experiencing \$2-a-day poverty live in households where an adult worked during the year, while only a small proportion live in households accessing TANF. Finally, households experiencing \$2-a-day poverty appear to be more likely to face material hardships than other low-income households.

Keywords: poverty, welfare, social policy, low-wage work, material hardship

The 1990s was a period of major change to federal means-tested income transfer programs targeting low-income families with children in the United States. The 1996 welfare reform replaced a federal entitlement program, Aid to Families with Dependent Children (AFDC), with a more restrictive program, Temporary Assis-

tance for Needy Families (TANF), which offers time-limited cash assistance and imposes work requirements on able-bodied recipients. Following this change, the cash assistance caseloads fell from 4.7 million families per month in 1994 to 1.7 million in 2013. Never during the Great Recession era did the TANF caseload rise

H. Luke Shaefer is associate professor at the University of Michigan School of Social Work and Gerald R. Ford School of Public Policy. **Kathryn Edin** is Bloomberg Distinguished Professor at the Zanvyl Krieger School and Bloomberg School of Public Health at Johns Hopkins University. **Elizabeth Talbert** is a doctoral student in sociology at Johns Hopkins University.

Luke Shaefer's time on this research was supported in part by the National Science Foundation under grant no. SES 1131500. The authors thank participants in the 2013 University of Chicago EINet Symposium, "Employment Instability and the Safety Net"; members and staff of the Council of Economic Advisers; session participants at the annual conference of the American Sociological Association; participants at the Russell Sage Foundation conference "Severe Deprivation in America;" and Indi Dutta-Gupta for helpful comments on earlier versions of this work. The opinions and conclusions presented here are solely those of the authors and should not be construed as representing the opinions or policies of the National Science Foundation or any other entity. Direct correspondence to: H. Luke Shaefer at Ishaefer@umich.edu, School of Social Work, University of Michigan, 1080 S. University Ave., Ann Arbor, MI 48109; Kathryn Edin at Kathy_edin@jhu.edu, Zanvyl Krieger School, Johns Hopkins University, Department of Sociology, 533 Mergenthaler Hall, 3400 N. Charles St., Baltimore, MD 21218; and Elizabeth Talbert at etalber2@jhu.edu, Zanvyl Krieger School, Johns Hopkins University, Department of Sociology, 533 Mergenthaler Hall, 3400 N. Charles St., Baltimore, MD 21218.

above 2 million families. Even in the worst economic times, TANF serves only a small fraction of the families that AFDC once did.

While cash assistance through AFDC and TANF has declined in significance, other meanstested income transfer programs have grown since the 1990s. Supplemental Nutrition Assistance Program (SNAP) caseloads fell during the late 1990s along with TANF caseloads, but SNAP rebounded in the 2000s as a result of the relaxation of some eligibility requirements and the weak economy of the Great Recession. In addition, the value of refundable tax credits like the Earned Income Tax Credit (EITC) increased a number of times, with expansions in the early 1990s and changes made as part of the 2009 American Recovery and Reinvestment Act. These benefits are conditional, however, on earnings from work: they increase in value as earnings rise to a point.

Taken in total, the changes to federal meanstested income transfer programs during the 1990s led to a net increase in means-tested income transfer aid flowing to poor families with children in the United States as low-income families benefited from growing access to refundable tax credits and relaxed SNAP eligibility rules. However, most of the increase in aid has been concentrated among families with earnings (Ben-Shalom, Moffit, and Scholz 2012), and thus there may have been a concurrent rise in the number of households surviving on very low levels of cash income (Shaefer and Edin 2013). In addition, much of what remains available to the nonworking poor comes in the form of in-kind aid rather than cash transfers.

Several studies have documented an increase in the number of the "disconnected": single mothers with neither earnings nor welfare (Blank 2007; Loprest 2011; Turner, Danziger, and Seefeldt 2006). These studies find that as many as one-quarter of single mothers were disconnected for at least a four-month period in 2009, a large increase since the mid-1990s. Luke Shaefer and Kathryn Edin (2013) built on these findings by broadening the study population to all poor households with children and accounting more fully for sources of unearned and in-kind cash income. They developed a metric of extreme poverty, adapted from the World Bank's metric of global pov-

erty: subsistence below a level of \$2 per person per day. Across three alternative definitions of income, they find that there was a marked rise in extreme poverty beginning in the late 1990s and continuing into the 2000s, well before the Great Recession began.

Their estimates of the increase in the proportion of non-elderly households with children experiencing extreme poverty between 1996 and 2011 vary depending on what is counted as income. When the cash value of SNAP, refundable tax credits, and housing assistance is accounted for, there is a 45.5 percent increase; when only cash income (including TANF) is considered, there is a 152.9 percent increase. As of mid-2011, roughly 1.65 million households with over 3.55 million children were reporting cash incomes of no more than \$2 per person per day. Shaefer and Edin (2013) also find that the rise in extreme poverty is concentrated among the households most likely to have been affected by welfare reform and that, descriptively, the decline in cash aid from AFDC and TANF is a major factor in understanding this trend.

Building on Shaefer and Edin (2013), Laurence Chandy and Cory Smith (2014) estimate the rate of \$2-a-day poverty for all U.S. households rather than only for households with children. They also account for a wider variety of in-kind programs (such as the National School Lunch Program, imputing a cash value for food eaten by kids at school). Despite these differences in their analyses, their baseline results "are roughly of the same magnitude as those of Shaefer and Edin and serve to reaffirm their core findings" (Chandy and Smith 2014, 4).

Chandy and Smith also compare income estimates to estimates on household consumption from the Consumer Expenditure (CE) survey and find what they consider to be a weak relationship between very low levels of reported income and very low levels of reported consumption. Based on this evidence, they argue that the American poor consume more than their incomes would suggest. This analysis depends, however, entirely on the quality of the CE data. There is evidence that the survey may be unrepresentative of households at the very bottom (see the appendix), and the CE survey has very low-quality measures of in-

come. These shortcomings of the CE may explain why Chandy and Smith find a weak relationship between income and consumption.

While the Shaefer and Edin (2013) results offer important evidence of trends in income levels at the very bottom of American society, their analysis raises many new questions. Do children typically experience only short spells of what we refer to here as \$2-a-day poverty (equivalent to "extreme" poverty in the earlier paper), or is the typical experience more one of longer periods of such deprivation? Under what circumstances does a family fall into a spell of \$2-a-day poverty? Finally, is the experience of \$2-a-day poverty associated with a greater degree of material hardship than other forms of poverty?

To more fully develop our understanding of the dynamics of \$2-a-day poverty in the United States, we present findings from both qualitative data collected by the authors and new analyses conducted on the SIPP. First we offer a case study from our qualitative fieldwork. We then present new results from analyses of the SIPP that offer a fuller understanding of the duration of spells, the circumstances that lead a family to enter a spell of \$2-a-day poverty, and the degree to which \$2-a-day poverty is associated with an elevated risk of material hardship.

DATA AND METHODS

Since 2012, we have engaged in what we call "iterative" mixed methods research on \$2-a-day poverty in the United States, conducting both qualitative and quantitative research simultaneously, with each line of inquiry informing the direction of the other. For example, a key finding from our qualitative research has been that job loss is a common precursor to a spell of \$2-a-day poverty. This has led us, in turn, to examine more fully the relationship between work and the risk of entrance into a spell of \$2-a-day poverty using the SIPP. When we identified, through our quantitative research, a concentration of \$2-a-day poverty in the southeast region of the United States, we opened additional qualitative field sites to better understand \$2-a-day poverty in this key region. We have also noted in our ethnographic work that a spell of \$2-a-day poverty often precipitates housing instability, and so we have focused on the incidence of housing instability as one measure of well-being in our quantitative work.

Qualitative Methods

Our ongoing ethnographic research has been conducted in four field sites with eighteen families who, when we first met them, had recently lived under the \$2-a-day threshold for at least three months' time, and usually for much longer. Our field sites are located in Chicago, Illinois; Cleveland, Ohio; Johnson City, Tennessee; and a number of small towns in the Mississippi Delta.

In each field site, we partner with local nonprofits referred to us by community members. We leave materials in the lobbies of these agencies, volunteer, and approach families who come seeking services. Because many among the \$2-a-day poor are isolated from such sources of aid, we also enlist the help of trusted community members in neighborhoods where we know many families are struggling.

We have met with all of the families in our sample over a period of at least six months and in many cases for more than a year, interviewing each family multiple times, observing their daily activities, and following the events of their lives. We examine the events surrounding each family's spells of \$2-a-day poverty and, in collaboration with our study team, identify common themes that emerge across cases. This investigation was approved first by the institutional review board (IRB) at Harvard University and currently by the IRB at Johns Hopkins University.

Quantitative Methods

Data for this line of research come from the SIPP collected by the U.S. Census Bureau. The SIPP is a nationally representative, longitudinal, multistage, stratified sample of the U.S. non-institutionalized population, collected in panels ranging from two to five years. The estimates presented here are for three calendar

1. We changed our terminology because the frequent use of "extreme poverty" interchangeably with the official Census Bureau designation of "deep poverty" confused readers.

years: 1996 (before states were required to implement the 1996 welfare reform),² 2005 (after the economy had recovered from the mild 2001 recession), and 2012 (the last year for which the 2008 SIPP panel can produce calendar-year estimates). The U.S. unemployment rate was roughly comparable in 1996 (5.4 percent) and 2005 (5.1 percent), and both followed years with comparable unemployment rates. The unemployment rate in 2012 was higher, at 8.1 percent.

Because of the unstable nature of households, we use the child as the unit of analysis that is followed over time. Calendar-year weights in the SIPP allow us to follow a nationally representative sample of children eighteen years old and younger who remained in the SIPP sample for the full calendar year under study. We select a sample of children ages zero to eighteen assigned calendar-year weights by the SIPP (so that we can follow them for a full year) for the years 1996, 2005, and 2012. We restrict our sample to children in households with annual incomes no more than 150 percent of the official poverty threshold during the calendar year under analysis.3 We also restrict our sample to children in households with low assets, defined as a net worth of less than 300 percent of the poverty line.4 Standard errors are adjusted using Stata's svy routine to account for the SIPP's complex survey design.

Some researchers might prefer a consumption-based measure of a household's resources for an analysis such as this one, given the extent to which poor Americans may

access noncash aid. We continue to use an income-based rather than consumption-based measure in part because of concerns regarding the quality of the available survey data that capture household consumption (see the appendix). But more importantly, our central argument is that cash resources have a particular salience in the United States. The various forms of noncash aid available to the American poor are important—even vital. Yet reductions in the accessibility of cash among the poorest of the poor in America signal a decline in a critical component of "capability" well-being, to borrow from Amartya Sen (1999). To be without cash income in the United States is to be without a flexible resource that is vital to having a chance of bettering one's circumstances. As two experts on global poverty put it, living without cash in the United States might be thought of as a kind of "purgatory," and the rise of \$2-a-day poverty here may "imply a severe form of poverty in both a practical and intangible sense" (Chandy and Smith 2014, 15).

Our household income measure includes the resources of all individuals living in a housing unit: labor market earnings, retirement benefits, cash income from public programs like TANF, reported income from friends and family members outside the household (such as child support), and income from informal sources. All income values are adjusted to January 2011 dollars using the Consumer Price Index for All Urban Consumers (CPI-U). Misreporting of income and public-program participation is a problem in major household

- 2. By 1995, many states had begun to implement new welfare programs through waivers granted by the U.S. Department of Health and Human Services (DHHS) and caseloads had begun to decline. However, these waivers were far from universal. We use 1996 as our starting time point because the Census Bureau undertook a major overhaul of the SIPP starting with the 1996 panel. This overhaul included changes to some variables, changes in the way the survey was administered, and changes in the length and size of panels, causing concern that trends relative to point estimates from prior panels might be the result of design effects.
- 3. We also examine results using alternative annual income cutoffs of 125, 185, and 200 percent of the poverty level. Results are substantively similar, fluctuating slightly in line with the respective restrictions.
- **4.** We also examine results using an alternative restriction based on having liquid assets with a value that would keep a family out of poverty for three months or less. Again, results are substantively similar. We use the definition based on net worth to weed out households with high housing equity but low levels of liquid assets.
- 5. We recode negative income values to cash income rates above our \$2-a-day poverty threshold because negative income values in the SIPP are often related to investments and tend to be from households with high incomes in other months.

surveys, but the SIPP does comparatively well relative to its peers in terms of reporting rates (Meyer, Mok, and Sullivan 2009). The SIPP has higher reporting rates for public-program participation than comparable surveys, and it asks many detailed questions about sources of income, both from formal employment and informal sources. Because administrative earnings records are insufficient for capturing informal income among the poor, the SIPP is the best choice for this study (see the appendix for more details).

We present estimates using two definitions of household income. The first is reported cash income from all sources (akin to the income measure used to calculate a family's official poverty status). The second definition adds SNAP benefits for an adjusted income measure, making the assumption that \$1 in SNAP benefits equals \$1 in cash. SNAP is the largest federal means-tested near-cash income transfer program in the United States and appears to have the largest impact on spells of \$2-a-day poverty of any public means-tested income transfer program, if counted as cash (Shaefer and Edin 2013).

In this analysis, we require that a child report at least three months during a calendar year with a household income below the threshold of less than \$2 per person per day (approximated as \$60 per person per month) to be counted as experiencing a spell of \$2-a-day poverty. Beyond this, in order to examine whether changes in \$2-a-day poverty in the child's household have been marked by an increase of relatively short or long spells, we distinguish between "episodic" and "chronic" spells of \$2-a-day poverty. We consider a child to have experienced episodic \$2-a-day poverty if the household reports a monthly household income below the \$2-a-day poverty threshold for at least three months but no more than six months over the course of a calendar year. We consider a child to be in chronic \$2-a-day poverty if the child's household reports a monthly household income below the \$2-a-day poverty threshold in at least seven months over the course of a calendar year.

Measuring Material Hardship

The SIPP is the primary source of nationally representative data on material hardship in the United States (Ouellette et al. 2004). We present bivariate estimates of the association between the experience of \$2-a-day poverty and the experience of some forms of material hardship, reported at a single point in time during the calendar year being analyzed. These are drawn from the SIPP's adult well-being topical module in the 2008 panel.⁶ It should be noted that the timing of this topical module does not necessarily coincide with a spell of \$2-a-day poverty, and thus some reports from families below this threshold over the course of the year may be from a time period when they had a higher income. This may bias downward the association between \$2-a-day poverty and material hardship.

We present estimates of rates of residential instability (captured in the core SIPP data by the number of residential address changes reported during the calendar year), a measure of housing quality, a measure of food insecurity, a measure of medical hardship, and an aggregate hardship measure (whether or not the household experienced any of these hardships). The SIPP household food security measure does not correspond exactly to the official U.S. Department of Agriculture (USDA) food security measures included as an annual supplement to the Current Population Survey (CPS); however, it is used in several studies and is closely related to the official food security measure (Nord 2006; Ratcliffe, McKernan, and Zhang 2011).

RESULTS

Case Study: Monique

Monique, an African American mother of two, wears a secondhand pair of jeans and a well-worn sweatshirt. Hair pulled back in a tight ponytail, she keeps a bright expression on her aged thirty-three-year-old face and is prone to express gratitude for the fact that though she's experienced so many trials, she has come through them. During those times over the past year when she's had a place of her own, its living room has been furnished sparingly,

6. These modules were administered at a point-in-time during waves 6 and 9. We report results from wave 6, which are reflective of 2010. Findings are substantively similar when wave 9 is used.

with only a plastic milk crate and one vinyl hassock to sit on. During various spells among the \$2-a-day poor, she and her two boys have found themselves in homeless shelters in Birmingham, Chattanooga, and Johnson City, Tennessee. She's also had spells living with kin—or having kin live with her—in order to save on rent.

Despite her hardship, Monique is rarely without a job, usually maintaining some type of employment by registering at temp agencies when permanent work isn't available. She gets SNAP benefits but hasn't received cash assistance since shortly after her youngest son was born. Though she believes she may be eligible for disability insurance—a pinched nerve in her leg causes her quite a bit of pain—she refuses to apply. "People say, 'Oh, girl, you get your disability,' and I can think to myself and say, 'Oh, you know it would be nice, but after a while, I'd get bored with just sitting in the house." Utility shutoffs are common in Monique's home, she and the boys wear used clothing gleaned from the Goodwill in town, and she walks to work sometimes for several miles—because she lacks money for public transportation.

Monique has dipped in and out of \$2-a-day poverty multiple times over the course of her life. She is a Birmingham, Alabama, native and survived a childhood riddled with abuse at the hands of her drug-addicted mother. After her mother's boyfriend kicked her out of the house at age twelve, Monique bounced between foster care and her grandfather's home. Monique's grandfather was intent on instilling traditional values in his granddaughter, which she says kept her on the straight and narrow. Monique remained a virgin until age eighteen and completed high school. She went on to become a certified nurse's assistant. When she was twenty-one, Monique gave birth to her first son; her second son, fathered by the same man, was born three years later. Shortly thereafter, the boys' father was incarcerated.

One day in Birmingham when her sons were playing outside, "the bullets started flying." Monique ran outside and grabbed the children, and while she hurried them inside, a stray bullet just missed her face and singed her hair. "I could smell my hair [burning]." She moved out of that neighborhood, where violence was in-

tensifying, and into her uncle's home several neighborhoods away, but still didn't feel safe. Not only did she not really trust her uncle—his substance abuse issues were well known in the family—but she couldn't forget her brush with that bullet. "I felt like I had been at war and I was shell-shocked and I was paranoid." Monique decided she and her sons needed to move somewhere safer—Chattanooga, Tennessee. A phone call revealed that there was a spot in a family homeless shelter there. The woman on the other end of the phone told Monique, "Yeah, yeah, we have somewhere for you to stay."

Upon their arrival in Chattanooga on a Greyhound bus, however, the homeless shelter had no open beds. Still, the staff assured them that a spot would open up in just a few days' time. Monique had saved a little of her tax refund for the security deposit on an apartment and had hoped to save more by staying in the homeless shelter while searching for a job. Now she felt that she had no choice but to check her family into a cheap motel—one that mainly served transients and prostituteswhile she waited, at \$70 a night. As each day ticked by, Monique's cash reserves dropped. Finally, she was informed that a spot at the shelter would open up in just three days' time, on Monday. If she used every penny of her remaining cash, she would still be \$83.90 short of what she needed to get through the weekend. The motel required payment in advance. She wrote a check for the remaining amount, knowing there was nothing in her bank account. Maybe they would be in the shelter by the time the check bounced and she could pay it back when she finally found a job.

The next day Monique received a call from the motel office asking her to come to the lobby. She told her young boys to keep watching cartoons; she would be back soon. Upon entering the lobby, two police officers arrested Monique—the check she had written had already bounced and the motel was pressing charges. Though her children were upstairs, Monique decided not to mention them to the police; she figured she would be back before they even missed her. Monique knew firsthand what happened to children who became enmeshed in the child welfare system, even temporarily, and wa-

gered that the probability of the children being found alone in a motel room was low.

While Monique was down at the station, one of the boys started to cry, and the noise was reported to the manager, who again called the police. Monique was charged with child neglect, and the boys were removed from her custody. "Things went down from there," Monique says. "They prosecuted me, I went to jail, and I lost my kids for sixteen months. All for \$80." After being released from jail, Monique went to work to regain custody. On earnings from temporary employment, she managed to secure a place to live-a requirement for regaining custody—while also dealing with court appearances, psychologist and counselor visits, and the worst depression of her life. She says she didn't know "how I was going to make it without [my sons]." Eventually, she would get them back, one of the greatest moments of her life.

In the meantime, and unbeknownst to her, she was accumulating a huge child support arrearage owed to the state of Tennessee for the sixteen months her kids were in the foster care system—she reports that it was compounded at an interest rate of 15 percent. As soon as Monique found a stable job—a part-time shift at McDonald's in Johnson City where she was forever begging for enough hours—the state began to garnish her check. "After all my working, I would make three or four hundred dollars in my check and have \$94 [to take home], because of the child support they took out of it. There were times we lived on \$150 a month—thank goodness for food stamps."

Monique has not been able to apply for public housing assistance since the family's move to Johnson City. In fact, because of a \$400 unpaid bill to the Chattanooga Housing Authority, where she had found housing after regaining custody of the boys, Monique believes she is "banned" from receiving any form of housing assistance. She's been living in a tiny, ramshackle house on the rural outskirts of Johnson City where the landlord sometimes allows her to perform repairs in lieu of much of the rent—which is supposed to be \$400. She's also taken in her uncle as a boarder—he's supposed to pay the utilities—\$50 for water and \$270 for the electricity that provides lighting and heat. But as it

turns out, he's been spending all of his disability check on drugs. Her church helped her keep up with the water bill, but the electricity was shut off. Then, in a January cold snap, the pipes in the home burst, forcing the family to vacate the property. Monique begged a friend to take them in temporarily.

At one point during their time in Johnson City, Monique acquired work at a paper factory a few towns over. "I didn't have enough for a taxi.... The taxi was going to charge me \$18 and I'm like, I couldn't [afford it]." Without a car and because the bus system didn't run anywhere near the factory, Monique walked two hours each way during the first week of the job: "I walked to work and got up at four in the morning since I didn't know how long it was going to take me." Finally, she found a coworker who could give her a ride. Her income qualifies her for free bus passes on the Johnson City transit system, but the sprawl of the city makes this form of transportation only intermittently useful. "It's hard for me to find a job that I can get to on the bus. Everywhere that is hiring you gotta have a car, so that's like a holdback for me. I can't afford a car-I can barely afford to have a roof over my kids' heads."

Monique strives to create a better life for her children. Though her limited cash resources make it difficult to provide basic needs, she finds ways to cover those needs and occasionally to treat her sons to something fun. She gets \$497 in food stamps and uses "every last one of them." Monique does what she can to make sure her sons get special experiences during their childhood, even if she has to get creative. "They'd say, 'Mommy, we want a Happy Meal.' [So] I would walk to the Dollar Store and buy them a toy and take a paper and staple the ends of it and take some French fries, make 'em a hamburger and put it on a tray when they were little, and that was their Happy Meal . . . they were happy! . . . I wanted to be frugal, so we still sometimes have to push it to make it."

As her children have gotten older, she has tried to explain to them why they can't always have treats: "I explain to them, 'Look, we can't go out because we have to pay this light bill." Monique buys her children's clothing at Goodwill or goes to clothes closets and yard sales; she provides for their needs before her own.

She buys only one pair of used shoes a year. Monique has a state-provided cell phone and does not have cable or Internet. She and her sons are covered by the TennCare health insurance. Her sons attend free after-school programming and play on the school's basketball team, yet are unable to afford new basketball shoes or uniforms.

Despite the challenges Monique faces, she remains optimistic about her future. She strives to always have a backup plan: "If you don't got no backup plan, you ain't got no plan." At last contact, Monique had decided that she wanted to move on, to leave Johnson City and try to get stable work at a soda pop factory in North Carolina, where she has heard they are hiring. Her desires are modest but hinge on stability for herself and her sons: "I'm going to say ten to twelve dollars an hour with at least thirty to forty hours a week. . . . I want a car, but is that hindering me? Heck no, it's not hindering me. Just stability. My main goal is having something that looks stable, that's mine . . . and it ain't goin' nowhere—it's comfortable, solid. . . . My determination is over the edge, I'm telling you. I'm going to be one of those people that's going to make it."

Synthesis of Qualitative Findings

Monique's story highlights a number of themes present in many of the stories of the eighteen respondent families included in our ethnographic research. First, many of the respondents facing \$2-a-day poverty found themselves in a cascade of hardship, experiencing not just a month or two of such circumstances but longer or recurring spells. Those in the worst circumstances found themselves experiencing the condition chronically. Second, job loss was a common precursor to a spell of \$2-a-day poverty. Low pay, unpredictable schedules, and a lack of sufficient hours permeate the low-wage sectors of the economy where many of our respondents found work. Finally, material hardship is a common experience among the \$2-a-day poor, but its forms may look different than for other Americans. For instance, Monique and her sons experienced a significant degree of housing instability. In some months, however, she might not respond affirmatively to a standard material hardship question about whether she had fallen behind on her rent, a standard indicator used to measure housing security.

NATIONAL ESTIMATES FROM THE SIPP

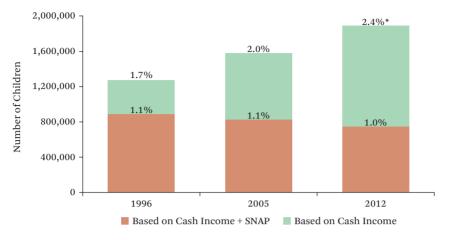
How many households with minor children are there in the United States like Monique's? Has the rise of \$2-a-day poverty been concentrated among those experiencing long or recurring spells?

Figure 1 presents estimates from the SIPP of the number of unique children in the United States who experienced a spell (multiple spells by the same child not counted) of episodic \$2-a-day poverty (between three and six months in length) during the calendar years 1996, 2005, and 2012. The full vertical bars, including both the upper and lower segments, represent the number of unique children experiencing episodic \$2-a-day poverty based on household cash income in each of these years. The lower portions of these bars represent the number of children experiencing episodic \$2-a-day poverty based on adjusted household income, which includes both cash and SNAP benefits as described earlier.

Based on the cash income-only definition, we find that the number of children experiencing episodic \$2-a-day poverty rose from 1.27 million in 1996 (1.7 percent of all children) to 1.58 million in 2005 (2.0 percent of children), and then to 1.89 million in 2012 (2.4 percent of children). In 2012 this rise represents a statistically significant increase in the probability that a child will experience an episodic period below the threshold of \$2 per person per day, relative to 1996 (after accounting for population growth).7 For reasons explained later, the overall growth in the number of children experiencing \$2-a-day poverty for three to six months during a calendar year is lower than what was found by Shaefer and Edin (2013) for overall \$2-a-day poverty.

7. This is determined by a bivariate regression predicting the risk of \$2-a-day poverty based on a year dummy, with a sample restricted to observations from 1996 and 2005, and then 1996 and 2010.

Figure 1. Unique Children in Episodic \$2-a-Day Poverty over the Course of a Calendar Year, 1996, 2005, and 2012



Source: Authors' calculations from SIPP, 1996, 2004, and 2008.

Notes: Calendar-year weights are used. Horizontal axis measures number of unique children; percentages of children and statistical significance appear at the top of the bars. Income dollars are adjusted to January 2011 dollars. A child must be eighteen or younger, must have an annual household income of 150 percent or less of the poverty line, and must have low assets to be counted in any \$2-a-day poverty group. Episodic extreme poverty is defined as three to six months below a household income of \$2 per person, per day.

p < 0.5

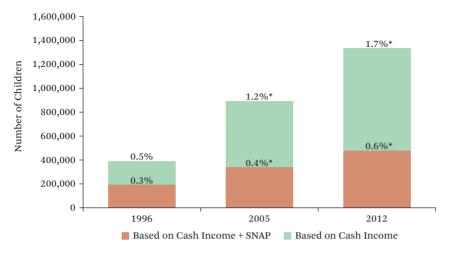
Further, as shown by the lower portion of the bars—where SNAP is counted as cash—we find no increase in the number of children experiencing an episodic spell among the \$2-a-day poor. This means that all of the increase in the prevalence of episodic \$2-a-day poverty between 1996 and 2012 is driven by children in households that have cash incomes below the \$2-a-day threshold but are accessing SNAP. The number of children in this category grew 97.4 percent between 1996 and 2005, and 200 percent between 1996 and 2012.

Figure 2 presents estimates from the SIPP of the number of unique children experiencing a spell of *chronic* \$2-a-day poverty—seven months or more below this threshold, the condition most common in our ethnographic work among households like Monique's—during the calendar years 1996, 2005, and 2012. The changes over time in this group are more dramatic than for episodic spells. As of 1996, the SIPP found fewer than 400,000 children experiencing a spell of chronic \$2-a-day

poverty based on household cash income (0.5 percent of children). By 2005, this number had reached 894,000 (1.2 percent of children), and by 2012 the SIPP registered 1.33 million children (1.7 percent of children) in households experiencing seven months or more among the \$2-a-day poor—a 241 percent increase between 1996 and 2012.

Further, there is also a statistically significant increase in chronic \$2-a-day poverty based on adjusted household income. In 1996 there were 196,000 children who had reported incomes that classified them as experiencing chronic \$2-a-day poverty when SNAP was taken into consideration. By 2005 this estimate had risen to 342,000 children, and by 2012 there were 478,000 such children, based on SIPP estimates—144 percent higher than in 1996. The estimates in 2005 and 2012 both represent statistically significant increases in the risk of chronic \$2-a-day poverty relative to 1996. As with the episodic results, however, the greatest increase in \$2-a-day poverty occurred among

Figure 2. Unique Children in Chronic \$2-a-Day Poverty over the Course of a Calendar Year, 1996, 2005, and 2012



Source: Authors' calculations from SIPP, 1996, 2004, and 2008.

Notes: Calendar-year weights are used. Vertical axis measures the number of unique children; percentages of children and statistical significance appear at the top of the bars. Income dollars are adjusted to January 2011 dollars. A child must be eighteen or younger, must have an annual household income 150 percent or less of the poverty line, and must have low assets to be counted in any \$2-a-day poverty group. Chronic extreme poverty is defined as seven or more months below a household income of \$2 per person, per day.

p < 0.5

children in households receiving SNAP but with cash incomes below the \$2-a-day poverty threshold. The size of this group increased 339 percent between 1996 and 2012.

Thus, when using the definition based on cash income only, figures 1 and 2 show increases in both episodic and chronic \$2-a-day poverty relative to 1996. The increases in chronic \$2-a-day poverty relative to 1996 are proportionally larger than for episodic \$2-a-day poverty, no matter which definition is used. These figures further reveal a statistically significant and substantively large increase in chronic \$2-a-day poverty even after accounting for SNAP. Thus, it appears that the changes in \$2-a-day poverty found in Shaefer and Edin (2013) were driven by increases in the prevalence of chronic more than episodic \$2-a-day poverty. It also appears that, for both figures, the largest growth in \$2-a-day poverty has been among children on SNAP but with household cash incomes below \$2 per person per day.

Characteristics of Children in \$2-a-Day Poverty

Table 1 presents selected characteristics of children in 2012 by poverty status, comparing higher-income children (those living in households with annual cash incomes above 150 percent of poverty) in column 1 to "other low-income" children (those living in households with annual cash incomes of no more than 150 percent of the poverty level but not experiencing \$2-a-day poverty) in column 2, and children experiencing either episodic or chronic \$2-a-day poverty in column 3. Owing to sample size limitations, we examine the characteristics of children in \$2-a-day poverty based on the cash-only definition and include those experiencing both episodic and chronic \$2-a-day poverty together in one category.

In 2012 low-income children were far less likely to be non-Hispanic white than higher-income children, but children who experienced \$2-a-day poverty were no less likely to be non-

Table 1. Characteristics of Children by Poverty Status, 2012 (Proportions)

	Higher- Income	Other Low-Income	\$2-a-Day Poverty
Race			
White, non-Hispanic	0.622	0.318	0.327
Black	0.102	0.213	0.246
Hispanic	0.170	0.380	0.340
Household type			
Married	0.793	0.505	0.379
Female-headed	0.145	0.420	0.540
Region			
Southeast	0.236	0.262	0.321

Source: Authors' calculations from SIPP, 2008.

Notes: Calendar-year weights used. Income dollars adjusted to January 2011 dollars. A child must have annual household income of 150 percent or less of the poverty line and have low assets to be counted in any \$2-a-day poverty group.

Hispanic white than other low-income children. Among both categories of low-income children, about one-third were non-Hispanic white, compared to 62.2 percent of higher-income children.

Table 1 estimates show that 37.9 percent of children in \$2-a-day poverty were in married households, as opposed to 50.5 percent of other low-income children and 79.3 percent of higher-income children. Children experiencing \$2-a-day poverty were the most likely of any of the three categories to be in a household headed by a single female: 54.0 percent of these children lived in a single female-headed household, as opposed to 42.0 percent of other low-income children and just 14.5 percent of higher-income children.

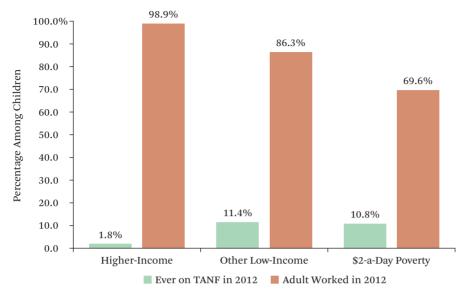
Table 1 further reports on a source of regional concentration of the \$2-a-day poor. The Southeast region includes the states often referred to as the "Deep South" and Appalachia, where we find Monique and her boys. In 2012 the SIPP found that 32.1 percent of children experiencing a spell of \$2-a-day poverty lived in the Southeast, compared to 26.2 percent of other low-income children and 23.6 percent of higher-income children.

Figure 3 reports on two key characteristics of the households of children by poverty status. The first characteristic is the proportion of children living in a household that reported TANF receipt in the SIPP over the course of the 2012 calendar year. The second is the proportion of children living in a house where an adult member worked in a formal job for at least one full month over the course of 2012. Only 1.8 percent of higher-income children lived in households that reported TANF receipt in at least one month of 2012. Still low but somewhat higher, 11.4 percent of children in low-income (but not \$2-a-day poverty) households reported TANF receipt during the year, as did 10.8 percent of households with children who experienced \$2-a-day poverty during 2012. Thus, children experiencing \$2-a-day poverty were not noticeably more likely to access TANF than other low-income children. For both groups, the rate of TANF receipt was low. Presumably, virtually all of the children living in \$2-a-day poverty ought to have been eligible for TANF.

The bars on the right track the proportion of children living in a household where an adult member worked for at least a full month during

8. The Southeast includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

Figure 3. TANF Receipt and Household Work Effort Among Children by Poverty Status, Calendar Year 2012



Source: Authors' calculations from SIPP, 1996, 2004, and 2008.

Notes: Calendar-year weights are used. Income dollars are adjusted to January 2011 dollars. A child must be eighteen or younger, must have an annual household income of 150 percent or less of the poverty line, and must have low assets to be counted in any \$2-a-day poverty group.

the course of the calendar year. Among higher-income children, such work effort was nearly universal—98.9 percent of children with annual household incomes above 150 percent of the poverty line lived in a household with this level of labor force attachment. The large majority of children in low-income families not experiencing \$2-a-day poverty also met this threshold of labor force attachment, with 86.3 percent living in a household where an adult worked for at least one full month during the year. While a lower percentage of children experiencing \$2-a-day poverty lived in a household with this same labor force attachment compared to children from the other two income thresholds, a large majority, 69.6 percent, did so: that is, in 2012 seven in ten children among the \$2-a-day poor lived in a household where an adult worked for at least a month during the year. This finding is consistent with the finding from our ethnographic work that respondents were

actively engaged in the labor market for at least part of the year. As we saw with Monique, disruptions in formal-sector market work seem to precipitate a spell among the \$2-a-day poor.

Fixed-Effects Analysis Predicting Changes in \$2-a-Day Poverty Status

Table 2 presents a fixed-effects linear probability regression model predicting child-specific changes in \$2-a-day poverty status. Fixed-effects ordinary least squares (OLS) models subtract all variables by their mean, causing all static characteristics such as race and sex to fall out of the regression model.⁹

The goal of this analysis is to see if child-specific changes in \$2-a-day poverty status are associated with child-specific changes in other household characteristics. Monthly SIPP data for the calendar year 2012 are clustered by child. The independent variables included in this

9. Results from a fixed-effects logistic regression model were substantively similar.

Table 2. Fixed-Effects Linear Probability Regression Results: Predicting \$2-a-Day Poverty Among U.S.	
Children, 2012	

	\$2-a-Day Po	overty by Cas	h Only	\$2-a-Day Po	overty by Cas	h and SNAP
Working adult in	-0.098**	-0.098**		-0.028**	-0.028**	
household	(0.007)	(0.007)		(0.004)	(0.004)	
TANF receipt	-0.079**		-0.073**	-0.031**		-0.029**
	(0.013)		(0.013)	(0.009)		(0.009)
Number of children	-0.006			0.000		
	(800.0)			(0.004)		
Number of adults	-0.007*			-0.004		
	(0.003)			(0.002)		
Unemployment rate	0.001			-0.001		
	(0.001)			(0.001)		
Overall R-squared	0.08	0.09	0	0.01	0.01	0

Source: Authors' calculations from SIPP, 2008.

Notes: Analysis is unweighted. Income dollars are adjusted to January 2011 dollars. A child must have annual household income of 150 percent or less of the poverty line and have low assets to be counted in any \$2-a-day poverty group.

model are monthly measures indicating the presence of a working adult, reported TANF receipt during the month, the number of children in the household during the month, and the number of adults in the household. The last two are included to capture the extent to which changes in household composition are related to changes in \$2-a-day poverty status. Also included is the child-month-year state seasonally adjusted unemployment rate.

We find that a change in the presence of a working adult in a child's household is an important predictor of a change in \$2-a-day poverty status. Also predictive are changes in TANF receipt and changes in the number of adults in the household. Columns 2, 3, 5, and 6 report on model variations that include a single predictor: first, whether there was a working adult in the household (columns 2 and 5) and then whether the household reported TANF receipt (columns 3 and 6). In both cases the point estimates remain consistent with the results from the model in columns 1 and 4.

However, the R-squared values suggest that the variable capturing the presence of a worker in the household contributes more to explaining variation in the outcome than does TANF receipt. Indeed, change in the work effort of adults in the households in which children reside seems to be an important predictor of changes in \$2-a-day poverty status.

Material Hardships Among the \$2-a-Day Poor

Table 3 reports on estimates of the rates of select material hardships experienced by children in \$2-a-day poverty during 2010 relative to other low-income children and higher-income children. We use 2010 data because this was the first year in the 2010 panel in which material hardship outcomes were collected. The first hardship represents the proportion of children who moved over the course of the 2010 calendar year. We examined this hardship in lieu of the material hardship outcomes associated with standard housing costs because of the high

10. Of course, some moves are indicative of positive outcomes for children, such as a move to a better neighborhood or a move for a parent's new job. But housing affordability is a key issue among poor families in the United States, and housing instability is associated with numerous poor outcomes.

^{*}p < .05; **p < .01

Table 3. Material Hardships Among Children by Poverty Status, 2010 (Proportions)

	Higher- Income	Other Low-Income	\$2-a-Day Poverty
Residential instability	9.0%	13.2%	22.9%*
Housing problem	10.8%	20.4%	19.0%
Food-insecurity	9.2%	24.4%	28.1%+
Medical hardship	6.7%	14.0%	19.7%*
Any of these hardships	27.9%	48.6%	59.0%*

Source: Authors' calculations from SIPP, 2008.

Notes: Calendar-year weights are used. Income dollars are adjusted to January 2011 dollars. Material hardship outcomes are merged from wave 6 of the 2008 SIPP panel. A child must have annual household income of 150 percent or less of the poverty line and have low assets to be counted in the \$2-a-day poverty group. Because of small sample size, adjustment using the svy routine could not be executed. Statistical significance is based on an unadjusted regression with indicators differentiating higher income, low income, and \$2-a-day poverty. Findings significant at the 0.05 level are robust to alternative specifications, and marginally significant findings are sensitive to specification. All point estimates remain substantively similar for 2011. All \$2-a-day poverty estimates are statistically significantly different from estimates for higher-income children at the 0.05 level or greater. $^*p < .10$; $^*p < 0.5$

rates of residential instability among our qualitative sample. Among higher-income children, 9.0 percent had one or more residential moves during the year. The same was true of 13.2 percent of other low-income children. Among children experiencing \$2-a-day poverty, 22.9 percent moved at least once over the course of the year—a rate nearly ten percentage points higher than the rate of residential instability experienced by other low-income children.

We find roughly the same levels of physical housing problems between the two groups of low-income children. However, estimates also suggest that children in \$2-a-day poverty are more likely to experience food insecurity: 28.1 percent reported household food insecurity, compared to 24.4 percent of other low-income children and 9.2 percent of higher-income children. The rate of food insecurity among the \$2-a-day poor is significantly different from the rate for other low-income children only at the 0.10 level. Children among the \$2-a-day poor also appear to be more likely to live in households reporting that a household member did not see a medical professional

when they needed to because of cost. Nearly 20 percent of children in \$2-a-day poverty lived in households reporting medical hardship, compared to 14.0 percent of other low-income children and 6.7 percent of higher-income children.

Taken together, these hardship results offer suggestive evidence that children experiencing \$2-a-day poverty are more likely to experience material hardships than other low-income children, not to mention higher-income children. In fact, in terms of the risk, \$2-a-day poor children were far more likely to have experienced at least one of these hardships in 2010 compared to other children, with nearly 60 percent reporting one or more of them. This is 10.4 percentage points above the rate for other low-income children, and 31.1 percentage points above the rate for higher-income children.

Sensitivity Analyses

Although the results from Shaefer and Edin (2013) and from this article appear robust in finding an increase in the number and propor-

11. See table notes for limitations to the testing of statistical significance.

tion of children reporting very low levels of income in the United States over the past fifteen years, all of these results remain subject to bias. It is possible that, insofar as SIPP respondents misreport their income, our estimates are biased upward. It is also possible that, insofar as SIPP respondents facing \$2-a-day poverty drop out of the sample (owing to residential instability), our estimates are biased downward.

In spite of the potential for misreporting on income and public-program participation, the SIPP remains the best source of nationally representative data currently available for this investigation. It would not be appropriate to use administrative earnings records, since these undercount income earned "off the books," which is particularly 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 did not fall over our study period in a way that would explain a dramatic and steady increase in \$2-a-day poverty.

Further, our original estimates were initially motivated by Kathryn Edin's qualitative fieldwork, through which she found herself interacting with more and more families who were surviving on no cash income. Our current fieldwork has taken us to four field sites, where we have interacted with eighteen families who would fit the \$2-a-day poverty profile if they were SIPP respondents.

Still, it would be beneficial to have the SIPP results externally validated by some other source of data. Given that the greatest increase in the \$2-a-day poverty population is among those reporting SNAP benefits, we turn to the SNAP administrative records. Households receiving SNAP benefits must verify their incomes for eligibility purposes usually every three to twelve months, depending on their state and status. Families can face stiff legal penalties if they knowingly misrepresent their income to increase their SNAP benefit levels.

Annual reports produced from SNAP administrative data have provided the total number of households with children in the United States receiving SNAP benefits who report no other source of income. Based on

these reports, figure 4 presents these annual totals with a dashed trend line, starting in 1996 and ending in 2012. In 1996 there were 316,000 SNAP households with children who reported no other source of income. This number began to rise in 2002 and by 2005 had increased to 599,000. By 2012 there were 1.2 million such households. This represents a substantial increase in the share of all households with children in these circumstances, and an increase in the share of all SNAP households. Thus, this increase cannot be explained simply by rising rates of SNAP receipt in the population.

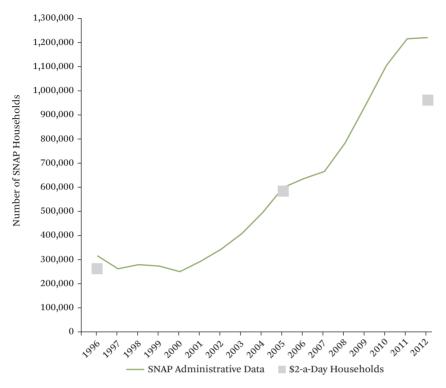
The closest comparison point for this trend line available in our SIPP estimates is the total number of \$2-a-day poverty households with children who report SNAP receipt. In the boxes plotted in figure 4, we present these SIPP-based population estimates in the form of unduplicated households in this state for the years 1996, 2005, and 2012. These population estimates prove to be remarkably close to the corresponding household counts from the SNAP administrative records in 1996 and 2005. Our SIPP estimates fall behind SNAP administrative data estimates as of 2012, suggesting that our SIPP estimates are on the low side.

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. As a final note, it is worth mentioning that misreporting of income itself suggests adverse outcomes, such as engagement in the underground economy. For example, in Kathryn Edin and Laura Lein's study Making Ends Meet (1997), which they 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); the most common such work involved selling sex.

DISCUSSION

The results presented here support and shed further light on what is reported by Shaefer and Edin (2013). When we examine children longitudinally, we find that the changes in the inci-

Figure 4. SNAP Households with Children Reporting No Other Source of Income (Administrative Records)



Source: Authors' calculations from U.S. Department of Agriculture, Food and Nutrition Service, "Characteristics of Supplemental Nutrition Assistance Program Households," fiscal years 1996–2013. Yearly reports available at: http://www.fns.usda.gov/ops/supplemental-nutrition-assistance-program -snap-research (accessed October 1, 2015).

Notes: These households report no other countable income. Boxes represent comparable estimates from SIPP \$2-a-day poverty households.

dence of \$2-a-day poverty are concentrated among children experiencing such a state chronically—that is, for seven or more months during a calendar year. Growth in chronic \$2-a-day poverty is seen using both the cashonly definition and after accounting for SNAP, the nation's largest means-tested transfer program. We find that 69.6 percent of children who experienced \$2-a-day poverty in 2012 lived in a household where an adult worked for at least one full month over the course of the year, while only 10.8 percent lived in households that reported receipt of TANF during the year. Not surprisingly, we find that change in the employment of household adults is a key predictor of change in \$2-a-day poverty status. Finally, we

find evidence suggesting that households experiencing \$2-a-day poverty are more likely to face certain material hardships than other low-income households and higher-income households.

These results suggest that SNAP plays a vital role at the very bottom of the income distribution, but they also raise the question of the proper cash value of \$1 in SNAP benefits for households that are highly resource-constrained. For households with other resources, economic theory suggests that SNAP and cash are roughly equivalent, increasing a family's budget constraint except in the region marked by very low food expenditures. However, it is unclear for families with no or very few

resources how a dollar of SNAP should be valued relative to a dollar in cash.

The descriptive analyses presented here also do not clarify the exact causal mechanisms leading to such a large rise in \$2-a-day poverty in the United States. We hypothesize that the virtual disappearance of a cash safety net for nonworkers has played an important role, as well as the extended period of high unemployment that has accompanied the Great Recession. A number of sensitivity analyses described here and in Shaefer and Edin (2013) offer suggestive evidence that this is correct. Yet future research must seek to more fully assess the causal relationship between the welfare reforms of the 1990s and the rise of \$2-a-day poverty.

Whatever the exact causal relationship, the results presented here lend more evidence to the assertion that there has been a fundamental shift in the circumstances of households with children at the very bottom of the bottom in the United States. What's more, the rising rates of spells of very low income found by Shaefer and Edin (2013) are concentrated among children experiencing such spells chronically rather than episodically. Such findings raise important questions about the adequacy of the U.S. meanstested income safety net.

APPENDIX

Measuring Extreme Deprivation in the United States: Is Consumption the Right Measure?

Consumption measures of poverty attempt to take the resources that families expend on current consumption and assign them a cash value, with the goal of estimating a total dollar value for what that family consumes over some period of time. Some researchers argue that a consumption-based measure of poverty may more directly reveal the resources available to families and be a more direct measure of material well-being than an income-based measure of poverty (Bavier 2014; Meyer and Sullivan 2003). Chandy and Smith (2014), for example, report that the World Bank prefers a consumption-based measure of poverty when estimating rates of global poverty (although some countries do use income-based measures), in part because people in developing countries often survive solely on resources that never take the form of cash, such as raising and tending to livestock or subsistence farming.

Some research offers evidence that consumption estimates from national representative surveys have a stronger association with key material hardship outcomes among some population subgroups, such as single mother households (Meyer and Sullivan 2003). However, to our knowledge there is no paper that shows that consumption is better than income in measuring hardship across the board, and the two measures generally paint qualitatively similar pictures of well-being among poor families with children. On the other hand, for some sub-groups, such as the mature population, there is preliminary evidence that income is much more clearly associated with material hardship than consumption (Charles et al. 2006). A great deal more research is needed to determine which is the more uniformly superior "instrumental" measure of well-being for the U.S. population.

Yet in efforts to evaluate changes in consumption among the poor over the past two decades, we are confronted with significant shortcomings of available data. The primary source of data for such analyses is the Consumer Expenditure Survey (CE). Recent evidence suggests that for the purposes of measuring low levels of income and consumption over the period of 1996 to 2010, the CE data may be deeply flawed (Bavier 2014).

A broader literature has for some time noted a divergence in trends between consumption poverty estimates produced by the CE and income poverty estimates from the Current Population Survey (CPS) since roughly the year 2001 (Meyer and Sullivan 2009). Until recently, these studies have called into question the value of income-based poverty measures. However, Bavier (2014) argues that the divergence of income poverty estimates yielded by CPS (and by extension the SIPP) and CE consumption poverty estimates after 2001 is not explained by fundamental differences in what is captured by a consumption-based poverty measure as opposed to an income-based measure. Rather this divergence may be the result of differences between the CE sample and the (much larger) samples of other major household surveys.

Bavier finds that trends in poverty rates based on adjusted income (accounting for taxes and public program benefits) in the CPS and consumption data from the CE matched quite closely during the period between 1984 and 2000. However, after that point in the CE, both the consumption poverty estimates and the income poverty estimates began a rapid decline that followed a starkly different path from income poverty rates recorded in the CPS and other major household surveys over this period. Thus, if one were to look only at the income poverty estimates from the CE, one would see the same divergence from the income data of the other major household surveys that one sees in the CE's consumption data.

Some researchers have raised questions about this analysis in terms of whether Bavier's calculation of income in the CE was conducted correctly. However, Bavier ushers in another test of the CE's representativeness using consumption data from the Panel Study of Income Dynamics. PSID did not include a full battery of household expenditure questions until the mid-2000s, and even today the reference period for these questions is not consistent across expenditure questions. Yet when PSID expenditure questions that remained consistent starting in 1999 are compared to the results from a similar set of questions in the CE, the resulting divergence leads to the same conclusion as the previous test that of the CE breaking away from peer surveys after 2000. The PSID consumption data remain in line with the CPS and its peers, while the CE takes a different path. Thus, at the very least, there is considerable disagreement across the primary nationally representative data sources that can be used to construct trends in expenditure and consumption poverty estimates.

Furthermore, the CE is currently undergoing a major redesign as a result of widespread concerns about data quality. Thus, we are of the opinion that the CE data should not be used in an analysis that examines trends in the

prevalence of households with very low resources over time.

Misreporting of Income and Public Program Participation in Household Surveys

Misreporting of income is a problem in major household surveys, but the SIPP does comparatively well relative to its peers in terms of reporting rates (Meyer et al. 2009). Analyses find that the SIPP records the highest level of aggregate income among families in the lowest income quintile, far more than the CPS or American Community Survey (Czajka and Denmead 2008). SIPP asks many detailed questions about sources of income, both from formal employment and from informal sources.

Reporting rates for public program participation are typically reflected by the difference between counts of participants yielded by surveys and counts of participants from administrative records (reported as the proportion of survey counts to administrative counts). In all household surveys, public program participation is nearly always lower than is reflected in administrative totals, but the SIPP has much higher reporting rates, on average, than its peer surveys. Most importantly, available evidence finds that SIPP reporting rates for most public programs have not fallen steadily over the study period in a way that could explain the increase in rates of \$2-a-day poverty.

Further, evidence from available studies is suggestive (although far from definitive) that misreporting of program participation is greatest among low-income families with existing sources of income—those who may cycle onto and off public programs in relatively short periods (Meyer and Goerge 2011). Thus, when examining families at the very bottom with few other sources of income in a given month, it is not clear the extent to which misreporting of public program participation will occur.

REFERENCES

Bavier, Richard. 2014. "Recent Trends in U.S. Income and Expenditure Poverty." *Journal of Policy Analysis and Management* 33(3): 700–18.

12. http://www.bls.gov/cex/ce_gemini_redesign.pdf (accessed October 1, 2015).

- Ben-Shalom, Yonaton, Robert Moffitt, and John Scholz. 2012. "An Assessment of the Effectiveness of Anti-poverty Programs in the United States." In *Oxford Handbook of the Economics of Poverty*, edited by Philip N. Jefferson. Oxford: Oxford University Press.
- Blank, Rebecca M. 2007. "Improving the Safety Net for Single Mothers Who Face Serious Barriers to Work." Future of Children 17(2): 183–97.
- Chandy, Laurence, and Cory Smith. 2014. "How Poor Are America's Poorest? U.S. \$2 a Day Poverty in a Global Context." Policy Paper 2014-03. Washington, D.C.: Brookings Institution.
- Czajka, John, and Gabrielle Denmead. 2008. "Income Data for Policy Analysis: A Comparative Assessment of Eight Surveys: Final Report."

 Washington, D.C.: Mathematica Policy Research, Inc. Available at: http://www.mathematica-mpr.com/publications/PDFs/incomedata.pdf (accessed October 1, 2015).
- Edin, Kathryn, and Laura Lein. 1997. *Making Ends Meet*. New York: Russell Sage Foundation.
- Loprest, Pamela. 2011. "Disconnected Families and TANF." Research Brief 2. Washington, D.C.: Urban Institute, Office of Planning, Research, and Evaluation (OPRE).
- Meyer, Bruce, and Robert Goerge. 2011. "Errors in Survey Reporting and Imputation and Their Effects on Estimates of Food Stamp Program Participation." Working Paper 11–14. Washington: U.S. Census Bureau Center for Economic Studies.
- Meyer, Bruce, Wallace Mok, and James Sullivan. 2009. "The Under-reporting of Transfers in Household Surveys: Its Nature and Consequences." Working Paper 15181. Cambridge, Mass.: National Bureau of Economic Research.

- Meyer, Bruce, and James Sullivan. 2003. "Measuring the Well-Being of the Poor Using Income and Consumption." *Journal of Human Resources* 38(S): 1180–1220.
- —... 2009. "Five Decades of Consumption and Income Poverty." Working Paper 14827. Cambridge, Mass.: National Bureau of Economic Research.
- Nord, Mark. 2006. "Survey of Income and Program Participation 2001 Wave 8 Food Security Data File Technical Documentation and User Notes." Washington: U.S. Department of Agriculture (USDA), Economic Research Service. Available at: http://www.nber.org/sipp/food_security/2001.pdf (accessed October 1, 2015).
- Ouellette, Tammy, Nancy Burstein, David Long, and Erik Beecroft. 2004. "Measures of Material Hardship: Final Report." Washington: U.S. Department of Health and Human Services (DHHS) (April). Available at: http://www.aspe.hhs.gov/sites/default/files/pdf/73366/report.pdf (accessed October 1, 2015).
- Ratcliffe, Caroline, Signe-Mary McKernan, and Sisi Zhang. 2011. "How Much Does the Supplemental Nutrition Assistance Program Reduce Food Insecurity?" *American Journal of Agricultural Economics* 93: 1082–98.
- Sen, Amartya. 1999. *Development as Freedom*. New York: Alfred Knopf.
- Shaefer, H. Luke, and Kathryn Edin. 2013. "Extreme Poverty in the United States and the Response of Federal Means-Tested Transfer Programs." Social Service Review 87(2): 250–68.
- Turner, Lesley, Sheldon Danziger, and Kristin Seefeldt. 2006. "Failing the Transition from Welfare to Work: Women Chronically Disconnected from Employment and Cash Welfare." Social Science Quarterly 87(2): 227-49.