

Pathways

a magazine on poverty, inequality, and social policy

Summer 2014

JOBS, JOBLESSNESS, AND THE NEW AMERICAN POVERTY

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Summer 2014

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Editors' Note

Should those of us who obsessively follow poverty statistics take heart from the positive labor market reports of late? In early July, the Bureau of Labor Statistics reported that unemployment declined to 6.1 percent, the lowest level since the collapse of Lehman Brothers some six years ago. We are also seeing a moderate drop-off in long-term unemployment and a moderate increase in the employment-population ratio. But what does this mean for poverty? Is a corresponding turnaround in poverty right around the corner?

Not necessarily. As Marianne Page points out in this issue, the jobs-poverty relationship has been weakening in recent decades, with the implication that the current expansion may not have the full poverty-reducing effect that we would like. Although economic expansions do still reduce poverty, they just don't reduce it as much as they once did. This weakening arises from many sources, but the two most important are that (a) many of the new jobs (especially high-skill ones) aren't available to the low-skill poor, and (b) even the low-skill jobs that are available don't always provide the requisite hours, wages, or security that are needed for a sure pathway out of poverty.

In this new world of a weakened jobs-poverty relationship, we no longer have the luxury of focusing laser-like on the economy, confident in the knowledge that, if we can just get the economy going, poverty will take care of itself. We must now have a targeted poverty policy as well as our usual bread-and-butter economic policy. The contributors to this issue provide insights into what we should—and shouldn't—do to reduce poverty in this new world of a weakened jobs-poverty relationship.

What type of immigration policy, for example, makes sense in this new world? Would it help to restrict immigration and thus protect the native poor from competition and the consequent downward pressure on their wages? The simple answer: No. As Giovanni Peri shows, this move would likely be counterproductive, as immigration in fact works to stimulate demand for low-skill labor.

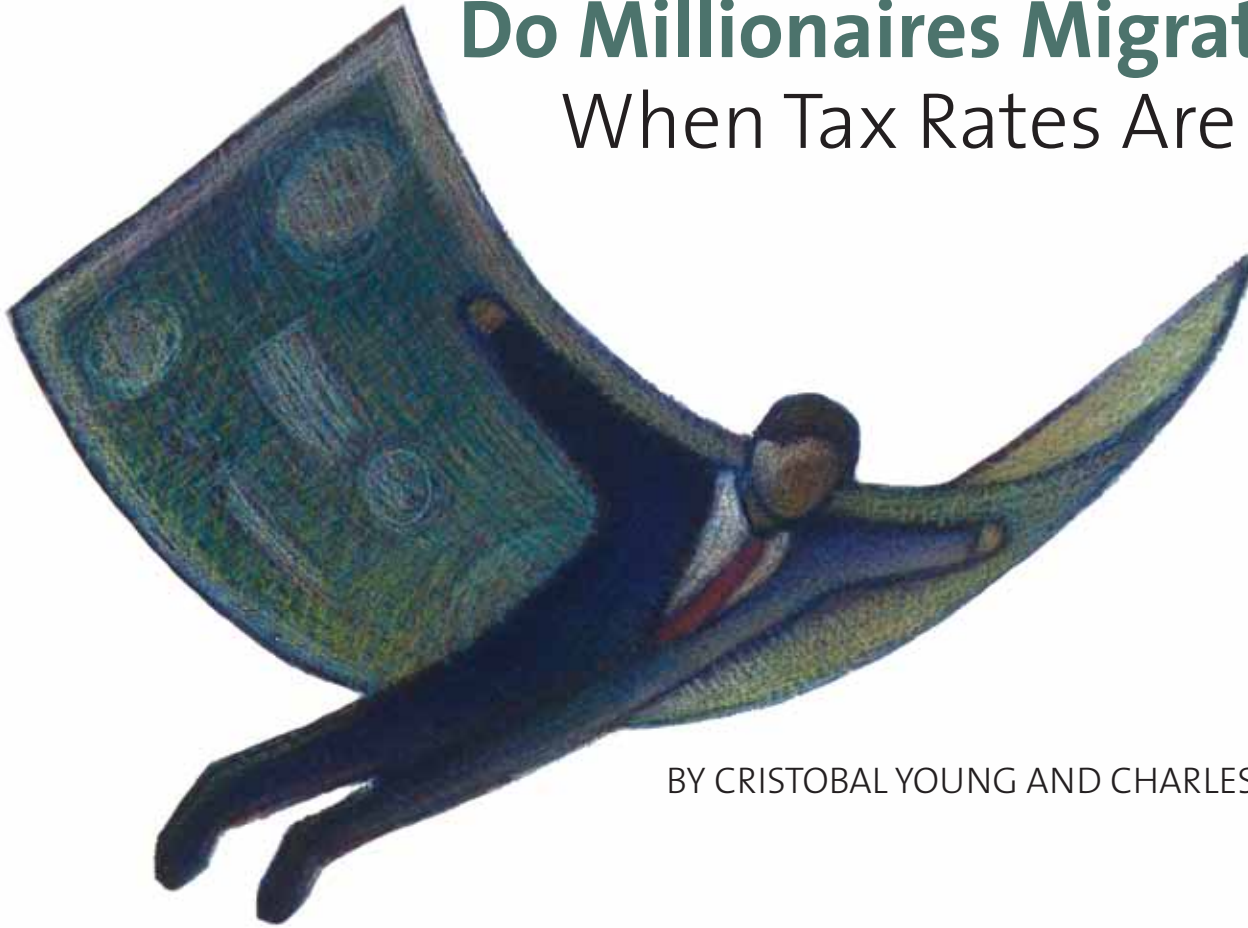
What type of income supplementation makes sense in this new world? Must we continue to rely heavily on tax credits (e.g., the Earned Income Tax Credit) to supplement the income of low-wage workers? The simple answer: Yes. As Hilary Hoynes shows, insofar as the new recovery brings even more low-wage jobs with it, there's probably no getting around a continuing strong reliance on tax credits to prop up those wages.

And, finally, what does this new world mean for our de facto hands-off policy for the nonworking poor? Do we need to rethink that policy and ramp up opportunities and benefits for those without jobs? The simple answer: Yes. If the poor aren't participating fully in the recovery, we need to recast our institutions and programs in ways that better connect them to the labor force and support them while that connection is being forged. As Luke Shaefer and Kathryn Edin discuss, the recent rise of nonworking poverty is one of the pressing problems of our time, a problem that often leads to poverty of a depth and severity that we had once thought was found only in less developed countries.

We care about connecting people to the labor market and ensuring that their incomes meet some minimal standard because, as Ann Stevens shows, the downstream costs of failing to do so are substantial, costs that are borne not just by the poor but also by the rest of us. The upshot: We need a new brand of poverty policy that doesn't adjust to our new world but that pushes us out of it ... as soon as possible.

—David Grusky, Charles Varner, and Michelle Poulin

Do Millionaires Migrate When Tax Rates Are Raised?



BY CRISTOBAL YOUNG AND CHARLES VARNER

States have been raising tax rates on top incomes. Does the pursuit of revenue lead to the flight of millionaires? We answer this question by examining two natural experiments in the state taxation of millionaires, in each case exploiting data from administrative tax records on the movement of elite income earners. As it turns out, the flight risk is greatly exaggerated: Millionaires are more attached to their states, and less inclined to migrate for tax purposes, than is often presumed.

Millionaire taxes are a growing fashion among U.S. state governments. Starting in 2004, New Jersey raised its income tax by 2.6 percentage points on income above \$500,000. California followed suit the next year with a 1 percent tax increase on income above \$1 million. Each of these taxes raises about \$1 billion annually in new revenue. Other states took notice, and with the fiscal crisis of the Great Recession, there was a wave of similar legislation. Nine states today, representing almost one-third of the U.S. population, have millionaire taxes (Table 1). There is indeed a rising sense that states can and should tax top incomes.

Nevertheless, millionaire taxes are often a flash point for heated controversy. Much of the debate hinges on whether mil-

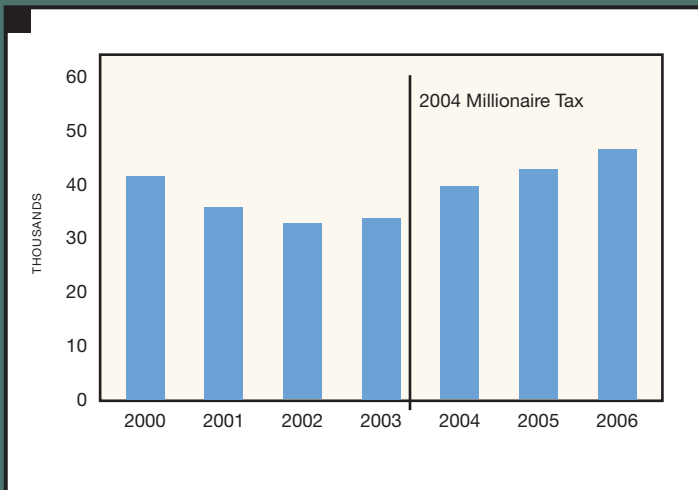
TABLE 1. States with “Millionaire Taxes”

State	Year Passed	Top Bracket	Top Marginal Rate	Percentage Point Increase
New Jersey	2004	\$500,000	8.97	2.60
California	2005	\$1,000,000	10.30	1.00
Maryland	2008	\$1,000,000	6.25	1.75
Hawaii	2009	\$200,000	11.00	1.00
Wisconsin	2009	\$225,000	7.75	1.00
Oregon	2009	\$250,000	11.00	2.00
New York	2009	\$500,000	8.97	2.20
Connecticut	2010	\$500,000	6.50	1.50
California	2012	\$1,000,000	13.30	3.00
Minnesota	2013	\$250,000	9.85	2.00

Note: There have been a number of changes to the rates and brackets since these taxes were first passed. However, all these states continue to have a “millionaire tax” in some form.

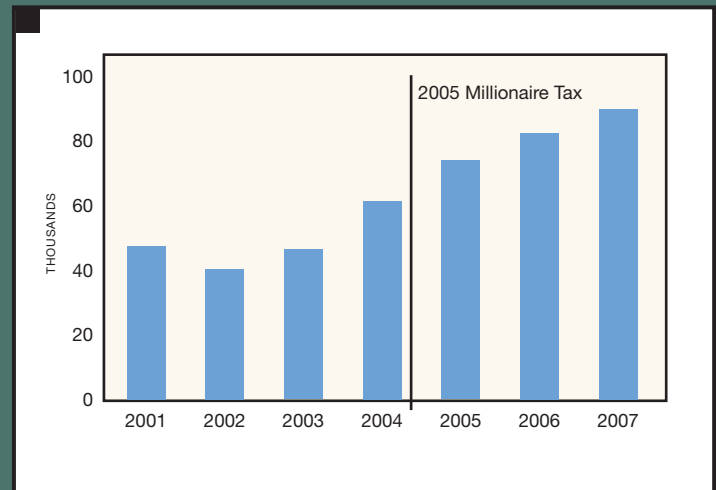
Sources: Tax Foundation, State Individual Income Tax Rates, 2004–2013; Authors’ compilation.

FIGURE 1. New Jersey Population Earning \$500,000+, 2000–06



Source: New Jersey Department of Treasury micro-data. N = 271,791

FIGURE 2. California Population Earning \$1 Million+, 2001–07



Source: California Franchise Tax Board micro-data. N = 443,338

lionaires will move away to states with lower taxes. Critics in California, for instance, warned that “when those required to pay this tax end up leaving the state...they will take their tax dollars with them.” In Maryland, the increase was dubbed the “Get Out Of Maryland Tax Act.” New Jersey Governor Chris Christie summarized the sentiment with his pronouncement: “Ladies and gentlemen, if you tax them, they will leave.”

The debate has therefore taken a predictable form. Some advocate taxing millionaires as both equitable and fiscally necessary, while others warn that the wealthy are so mobile that the new taxes will only be self-defeating and will worsen state fiscal health. But to date, there is little systematic evidence about elite mobility or the likelihood of tax flight among millionaires. Our research sets out to bridge this gap. We use the recent rise in state millionaire taxes and access to individual state income tax records to test whether progressive taxation leads to millionaire migration. We analyze the effects of these taxes in the first two states to enact them, New Jersey in 2004 and California in 2005. Our in-depth analyses are reported elsewhere (see key resources). Here, we present our core results in broad strokes.

Using Big Data to Study Migration

We use big data from administrative tax records to establish a virtual census of millionaires in their respective states. Our base data sets include all individual tax records filed in New Jersey (2000–2007) and California (1987–2009), yielding millions of observations on high income earners. These two data sets cover years before and after the tax increases were imposed, allowing an analysis of two “natural experiments.” In addition to micro-data on every individual affected by the taxes (“millionaires”), we also use, as control groups, high-income earners who were not affected by the taxes.

Elites and Migration in Two Millionaire Tax States

The first state millionaire taxes were passed during times of prosperity, and the new taxes did not disrupt the momentum. In New Jersey, there was a surge in the number of millionaires after the tax was passed, an increase of 38 percent by 2006 (13,000 new millionaires, see Figure 1). California also saw substantial growth in millionaires after its 2005 tax increase, with a rise of 30 percent by 2007 (Figure 2). Detailed yearly data for each state are shown in Table 2.

These millionaire booms were not caused by a rush of high earners moving into these states. Rather, they were fueled by income growth at the top, as more residents became millionaires. These were times of economic growth and rising inequality. Federal income tax records indicate that over 60 percent of all income growth during this economic expansion (2002–2007) accrued to the top 1 percent. Growth in the millionaire population was in this sense inevitable.

From a demographic perspective, changes in the millionaire population are mostly driven by the “birth rate” (people becoming millionaires) and the “life expectancy” (how long people persist with millionaire incomes). Migration itself has played only a small role in the ups and downs of these state’s millionaire populations.

For example, in New Jersey in 2005, the out-migration of millionaires increased by 37 individuals—a loss that *could* be attributed to the new tax. In the same year, however, the millionaire population increased by over 3,000 individuals. Similarly, in California the net migration of millionaires fluctuates each year by about 120 people, while the millionaire population as a whole fluctuates by about 10,000 individuals. Shifts in migration account for only 1 to 3 percent of year-to-year changes in the millionaire population. This fact is key to millionaire demography: Unlike the population of say, teenagers, a state’s population

TABLE 2. Population and Migration Counts for New Jersey and California, by Year

NEW JERSEY												
Control Group (\$200k–\$500k)							Treatment Group (\$500k+)					
Year	Population	Out	In	Out-In (net out)	Net Out Rate	Marginal Tax Rate	Population	Out	In	Out-In (net out)	Net Out Rate	Marginal Tax Rate
2000	139,829	3,660	4,074	-414	-0.3%	6.37%	41,358	1,339	1,100	239	0.6%	6.37%
2001	133,817	3,190	3,392	-202	-0.2%	6.37%	35,621	1,144	772	372	1.0%	6.37%
2002	129,848	3,128	3,153	-25	0.0%	6.37%	32,726	1,038	696	342	1.0%	6.37%
2003	131,297	3,303	3,082	221	0.2%	6.37%	33,696	1,065	682	383	1.1%	6.37%
2004	138,442	3,717	3,199	518	0.4%	6.37%	39,235	1,401	824	577	1.5%	8.97%
2005	145,628	3,848	3,317	531	0.4%	6.37%	42,504	1,474	860	614	1.4%	8.97%
2006	153,582	3,783	3,084	699	0.5%	6.37%	46,651	1,460	774	686	1.5%	8.97%

CALIFORNIA												
Control Group (\$500k–\$1M)							Treatment Group (\$1M+)					
Year	Population	Out	In	Out-In (net out)	Net Out Rate	Marginal Tax Rate	Population	Out	In	Out-In (net out)	Net Out Rate	Marginal Tax Rate
2001	75,464	1,165	948	217	0.3%	9.30%	47,648	767	850	187	0.4%	9.30%
2002	68,351	1,004	904	100	0.1%	9.30%	40,171	637	467	170	0.4%	9.30%
2003	77,145	1,068	905	163	0.2%	9.30%	46,613	651	464	187	0.4%	9.30%
2004	95,604	1,226	1,024	202	0.2%	9.30%	61,500	766	517	249	0.4%	9.30%
2005	113,185	1,634	1,168	466	0.4%	9.30%	74,385	820	650	170	0.2%	10.30%
2006	124,452	1,586	1,244	342	0.3%	9.30%	82,769	859	700	159	0.2%	10.30%
2007	134,216	1,533	1,331	202	0.2%	9.30%	90,252	831	793	38	0.0%	10.30%

Source: Micro-data from the New Jersey Division of Taxation and the California Franchise Tax Board.

of millionaires is highly sensitive to the business cycle. Teenagers don't disappear in large numbers during recessions, but millionaires do.

Nevertheless, the key policy question we address is how responsive millionaires are to state tax increases. If states add a 1 percent millionaire tax, how many millionaires will likely leave the state?

To answer this question, we look at the migration patterns of millionaires before and after a tax increase. Then we compare this with control groups of high-income earners just below the millionaire bracket who did not face the tax increase. The control groups capture the underlying trends in migration that are not due to tax changes. In our studies, households in the 95th to 99th percentiles of the income distribution did not face a tax increase and serve as control groups for those in the top 1 percent. If the migration of millionaires rises relative to the control groups when the taxes are passed, this is evidence showing millionaire tax flight.

New Jersey's out-migration among millionaires did increase after the tax was passed (right panel, Figure 3), rising from 0.9 percent to 1.4 percent, suggesting a tax flight loss equal to about one half of 1 percent of the millionaire population. However, this does not seem to be attributable to the tax itself. The control group of high-income earners (left panel, Figure 3) saw an almost identical increase in out-migration, despite being unaffected by the tax. Millionaires do have higher migration rates than non-millionaires, but this was equally true before the tax

increase. There is higher out-migration after the tax than before, but this is equally true for high earners who do not pay the tax. Exposure to the tax increase has no readily observable influence on migration patterns. These findings also hold in difference-in-difference regression models that control for a range of demographics, income levels, and income sources.

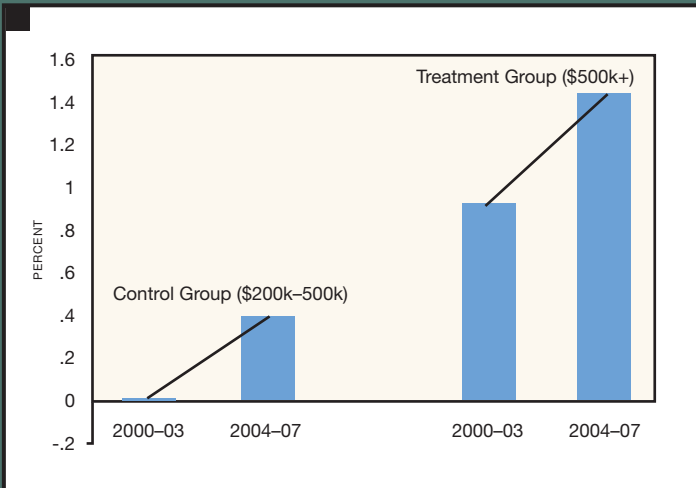
In California (Figure 4), the pattern is even more pronounced. Net out-migration increased for the control group, but not at all for the treatment group (millionaires exposed to the tax). This implies a “wrong-signed” effect: Raising taxes on millionaires would somehow seem to have discouraged out-migration or made California more appealing. It is unclear what is driving this outcome. We suspect that something about the high tech boom, occurring at the same time as the tax increase, disproportionately favored millionaires in California and overwhelmed any potential tax flight response.

What is clear is that neither state offers transparent evidence for a “flight of the millionaires” effect. First, the rise and fall of the millionaire population is largely due to income dynamics—residents growing into or out of the millionaire bracket—not due to migration. Second, migration itself seems largely unaffected by changes in tax rates.

Why So Little Migration Response?

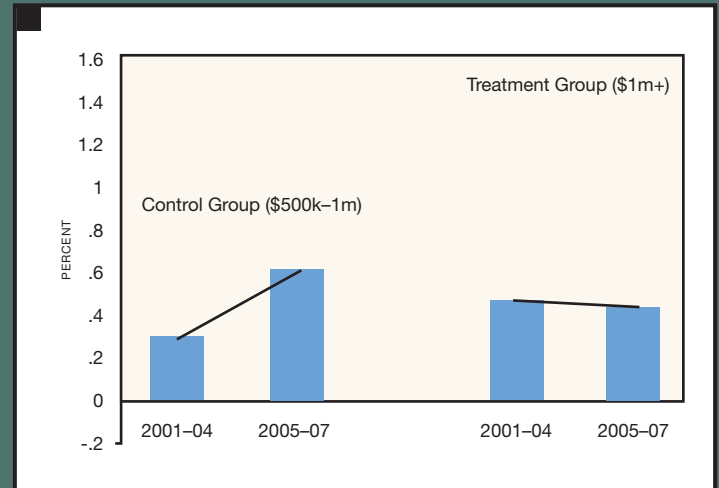
“There's nothing more portable,” said California Republican leader Bob Huff, “than a millionaire and his money.” Why does this intuition find such little empirical support? Three key rea-

FIGURE 3. New Jersey: Net Out-Migration Rates Before and After Tax Increases



Source: New Jersey Department of Treasury micro-data. N = 1,420,652.

FIGURE 4. California: Net Out-Migration Rates Before and After Tax Increases



Source: California Franchise Tax Board micro-data. N = 1,157,997.

sons are likely behind the stability of millionaires.

Millionaire incomes are temporary. Most people paying the millionaire tax are having an unusually good year and do not earn such high incomes every year. Falling in this tax bracket is a temporary condition, associated with the very peak of one's career. Millionaire taxes, in effect, target spikes in income, rather than regular annual incomes.

To see this, we followed the incomes of millionaires in California over time. We took people who were in the millionaire bracket in a given year and tracked their income for six years before and six years after. If a person, for instance, earned \$1.5 million in 2001, we looked at his or her income history back to 1995, and then forward to 2007. As shown in Figure 5, the representative millionaire has seen strong recent income growth, and will not earn this much money again in the future. People are typically in the millionaire bracket for 7 out of 13 years, or 54 percent of the time. Over this "lifetime," only 14 percent of their total income was above the million-per-year bracket and subject to the tax. In other words, the burden of the tax is largely dispersed among people who pay it for only a few years.

Earning power doesn't migrate well. People can move to other states, but they may not be able to take their annual incomes with them when they move. Earning power is often place-specific; it is not easily transferred around the country like funds in a bank account. Income potential derives not just from one's individual talent (which is movable) but also from one's position in a localized world of colleagues, collaborators, rivals, and market conditions. The "1 percent" are deeply embedded insiders flush with local market knowledge and place-specific social capital.

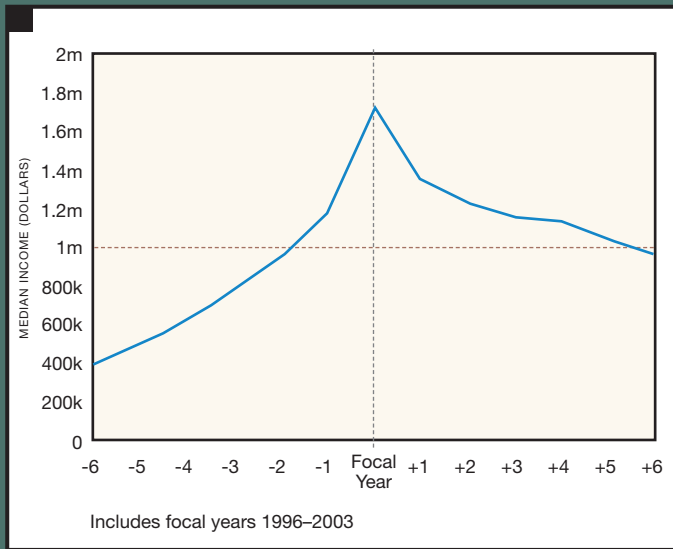
The tax flight argument often relies on a notion of the "idle rich," who are simply looking for the best harbor to temporarily moor their yacht. A more accurate image of most high-income earners is of the "working rich"; most of their income is from

employment, they are at their peak years of earnings, and they are drawing on long personal investments in a career or business line that are place-specific rather than portable.

An important caveat to our core results reinforces this point. When we restrict attention to millionaire retirees, there is indeed evidence of tax flight. In New Jersey, we focused on individuals who are retired and earn their income entirely from investments—primarily stock market earnings. While this is a small group (representing less than 10 percent of millionaires), retirees are more mobile in general, and they show a clearly visible rise in migration following the tax increase. For this group, the tax flight response is one-to-one: a 1 percent increase in the tax rate leads to a 1 percent loss of the population. Thus, among people who have little or no economic anchors to geographic place, there is a much stronger migration response to tax increases. But few millionaires fall into this group.

Affordability is not the only concern. State taxes are one aspect of the regional differences in the cost of living. To the bottom line, state taxes are no different than the cost of housing or the price of restaurant meals. Millionaires tend to live in the more expensive parts of the country, and in the most expensive areas of town. California and New Jersey are expensive places to live, but more because of the high and rising cost of housing than because of the tax rates. Silicon Valley, for example, includes five of the top-10-most expensive housing markets in America. A typical home in Palo Alto, California, is about 10 times as expensive as a similar house in Stockton or Modesto, towns that are within commuting range of Palo Alto. Yet housing price competition has not lured high-tech millionaires into California's affordable Central Valley region. If millionaires do not make small-distance moves for big savings on their housing costs, why would they make long-distance moves for smaller savings on their taxes?

FIGURE 5. Median Income Profile of People Making \$1M+ in Focal Year



Source: California Franchise Tax Board micro-data. N = 326,312.

Conclusion: Embedded Elites

State tax competition—cutting taxes to attract top income earners—is part of a broader discourse of jurisdictions competing for resources, businesses, and population. The fear of being undercut by other states is often cited by political leaders and interest groups seeking to scale back environmental, labor, and business regulations. However, in a recent comprehensive review, Bruce Carruthers and Naomi Lamoreaux conclude that jurisdictional competition has been widely exaggerated, and that “differences in the regulatory burden [across states] seldom cause significant numbers of firms to relocate.” Most of these potential “regulatory races,” as they call them, are non-starters.

This seems equally true of state tax competition. While millionaire tax flight is an intuitive concern, evidence of it is difficult to find. Our analyses, however, do not mean that states have a free hand to engage in runaway taxing of the rich. We have evaluated modest tax increases in the range of 1 to 3 percent. Larger tax increases may well have greater salience and impact.

Moreover, states should spend millionaire tax revenues with caution. Millionaire-bracket incomes are especially sensitive to

the business cycle, and revenues from the tax will fall sharply during recessions. States would be wise to set aside 20 to 30 percent of these revenues for a “rainy day” fund.

Warnings of dramatic millionaire migration are a modern Ayn Rand novella: *Resentful of taxation*, the economic elite withdraw their services and abandon society. In contrast, we see little migration as a result of millionaire taxes. Earning power—even at the top—is not readily mobile. Millionaires are both socially and economically embedded in their states, and they typically pay the tax only for a few years. If these tax dollars are prudently managed and well-invested in communities, some of the benefits may even be appreciated by millionaires themselves. ■

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Charles Varner is associate director of the Center on Poverty and Inequality at Stanford University. His research examines the political and fiscal underpinnings of inequality and poverty.

Key Resources

Carruthers, B., & Lamoreaux, N. (2012). *Regulatory races: The effects of jurisdictional competition on regulatory standards*. Working Paper. Department of Sociology, Northwestern University.

Saez, E. (2013). “Striking it richer: The evolution of top incomes in the United States” (updated to 2013). Originally published in *Pathways Magazine*, Stanford Center for the Study of Poverty and Inequality, Winter 2008, 6–7.

Young, C., & Varner, C. (2011). “Millionaire migration and state taxation of top incomes: Evidence from a natural experiment.” *National*

Tax Journal, 64(2), 255–284

Varner, C., & Young, C. (2012). “Millionaire migration in California: The effect of top tax rates.” Working Paper. Stanford Center on Poverty and Inequality.

The Hispanic Health Paradox

The “Hispanic Health Paradox” refers to the finding that Hispanics in the United States tend to have relatively low mortality and better health than one might expect. The long-standing worry, however, has been that various data artifacts might exaggerate the health of Hispanics and create the misleading appearance of a paradox.

Using new methods that reduce some of these problems, Fernando Riosmena, Rebecca Wong, and Alberto Palloni show that the paradox is likely real, although it mainly takes on a “weak form.” That is, the authors don’t find that Mexican immigrants are typically more healthy than non-Hispanic whites (the “strong form” paradox), but they do find that a health advantage appears when Mexican immigrants are compared with non-Hispanic whites of similar socioeconomic standing (the “weak form” paradox).

Why are immigrants more healthy? Although many causes are likely driving this result, the effects of various types of selection emerge most clearly, including (a) the tendency of healthier Mexicans to emigrate to the United States, and (b) the tendency of less healthy immigrants to return to Mexico. If such selective forces prove to be dominant, the paradox mainly becomes a culling story about how the United States attracts healthy people and expels less healthy ones.

Riosmena, F., Wong, R. & Palloni, A. 2013. “Migration Selection, Protection, and Acculturation in Health: A Binational Perspective on Older Adults.” *Demography* 50 (3), pp. 1039–64.
<http://link.springer.com/article/10.1007%2F13524-012-0178-9>

A Newly Democratic Elite?

In recent years, there have been growing concerns that social mobility may be declining in the United States, indeed even President Obama has expressed just such worries. Although there are many studies of mobility among the general population, we don’t know as much about mobility among the very wealthy. How much mobility is there into the ranks of the super-rich?

Using data from *Forbes* magazine on the 400 wealthiest individuals in the United States, Steven Kaplan and Joshua Rauh find that the super-rich are not quite as exclusive as they once were. Whereas 60 percent of the super-rich in 1982 had super-rich parents, only 32 percent in 2011 had such rarefied origins. Are the new super-rich now drawn from poor or middle-class families? Of course not! Rather, there’s just a slight downward drift in their origins, with some of the slots once filled by the children of the super-rich instead being filled by children from moderately wealthy backgrounds. The upshot: The new super-rich are becoming a slightly more democratic class.

Kaplan, S. N. & Rauh, J. 2013. “It’s the Market: The Broad-Based Rise in the Return to Top Talent.” *Journal of Economic Perspectives* 27 (3), pp. 35–56. <http://www.aeaweb.org/articles.php?doi=10.1257/jep.27.3.35>

Caring about Polarization

The ongoing polarization of the U.S. job structure has to count as one of the most famous social science facts of our time. But what accounts for polarization? Although it’s often argued that computerization and related technological changes are behind the rising demand for high-wage jobs and the deskilling of middle-wage jobs, the evidence for this account is still incomplete.

Using the Current Population Survey, Rachel Dwyer shows that the expansion of care work (e.g., child care, teaching, health care) over the last 25 years contributed to 60 percent of the job growth in the bottom wage quintile, 40 percent in the fourth quintile, and 20 percent in the top quintile. In large measure, the story of polarization is accordingly a story of the expansion of care work, a story that depends less on technological change than the rise of the healthcare industry, the takeoff in female labor force participation, and the consequent need to outsource care.

Dwyer, R. E. 2013. “The Care Economy: Gender, Economic Restructuring, and Job Polarization in the U.S. Labor Market.” *American Sociological Review* 78 (3), pp. 390–416.
<http://asr.sagepub.com/content/78/3/390>



Are Jobs the Solution to Poverty?

BY MARIANNE PAGE



Here's a common mantra: The only enduring solutions to poverty are economic growth and the jobs it delivers. Although the mantra is delivered especially frequently in the case of less developed countries, it's also sometimes advanced as a poverty-reduction recipe for more developed ones like the United States. If the mantra were true, it would mean that we'd be well advised to focus all of our policy efforts on growing the economy and increasing employment opportunities, thus allowing us to treat more focused, poverty-specific policies merely as temporary stopgaps.

The purpose of this article is to evaluate whether a simple pro-jobs policy of this sort would reduce poverty in the United States as much as we'd like. In carrying out this evaluation, a natural starting point is to examine the empirical association between labor market conditions and poverty. After all, if it is established that the relationship between poverty and employment opportunities is not all that strong in the United States, then providing more jobs would not likely be a viable solution to poverty.

I begin by discussing how the jobs-poverty relationship has been weakening in recent decades, due in part to ongoing changes in (a) the *types* of jobs that our economy is creating and (b) the *sectors* of the labor market that are positioned to secure these jobs. After laying out these changes, I'll discuss their implications for crafting antipoverty policy that works.

The Empirical Relationship Between Jobs and Poverty

It is well known that economic downturns increase poverty. Jobs disappear, working hours are cut, and wages fall. This is especially true at the bottom of the income distribution. The very groups that, even in the best of times, are close to the poverty line—blacks, Hispanics, young people, and the less educated—are those that tend to suffer most during recessions.¹ During the Great Recession, for example, the poverty rate of children increased more than the rate of any other age group. This is because children typically live with younger adults, who, as a result of their relative inexperience, tend to be among the first to lose their jobs during mass layoffs.

Unless safety-net programs fully replace lost income, an across-the-board rise in unemployment will mechanically increase the number of people who are poor. Figure 1 shows the close relationship between the economy's overall health, as measured by unemployment, and the poverty rate. The correlation between changes in unemployment and changes in poverty is 0.65.

But is the strength of this relationship changing over time? Is aggregate job growth becoming a less effective lever on poverty?

Indeed it is. Figure 2, which graphs the change in the poverty rate against the change in the employment rate (for adults aged 25–54), shows that since the 1980s there has been a weakening in the jobs-poverty relationship. Recent labor market expansions, though similar in both magnitude and duration to the 1960s expansions, do not cut poverty as much as we'd come to expect. From 1962 to 1969, employment grew 4.7 percentage points, and poverty fell 9.8 points, more than twice the employment growth. In contrast, during the mid-1980s, despite significant labor market expansion, poverty fell far less.

Why Aren't Jobs Delivering?

In understanding why the relationship between the employment rate and poverty is weakening, it's useful to lay out the parameters that are relevant to the strength of this relationship, parameters that pertain to the types of jobs that are available, the capacity of the low-skill labor force to acquire these jobs, and its capacity to exit poverty through means other than work. These parameters are (a) the availability of *unconditional benefits* (benefits that are not conditioned on employment), (b)

FIGURE 1. Unemployment and Poverty

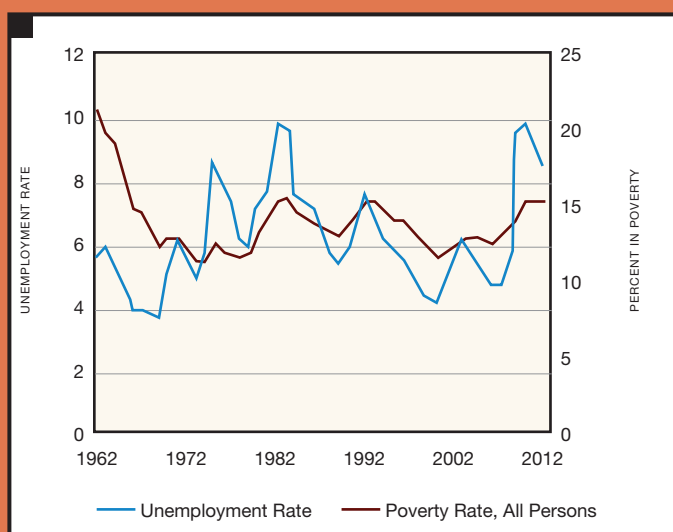
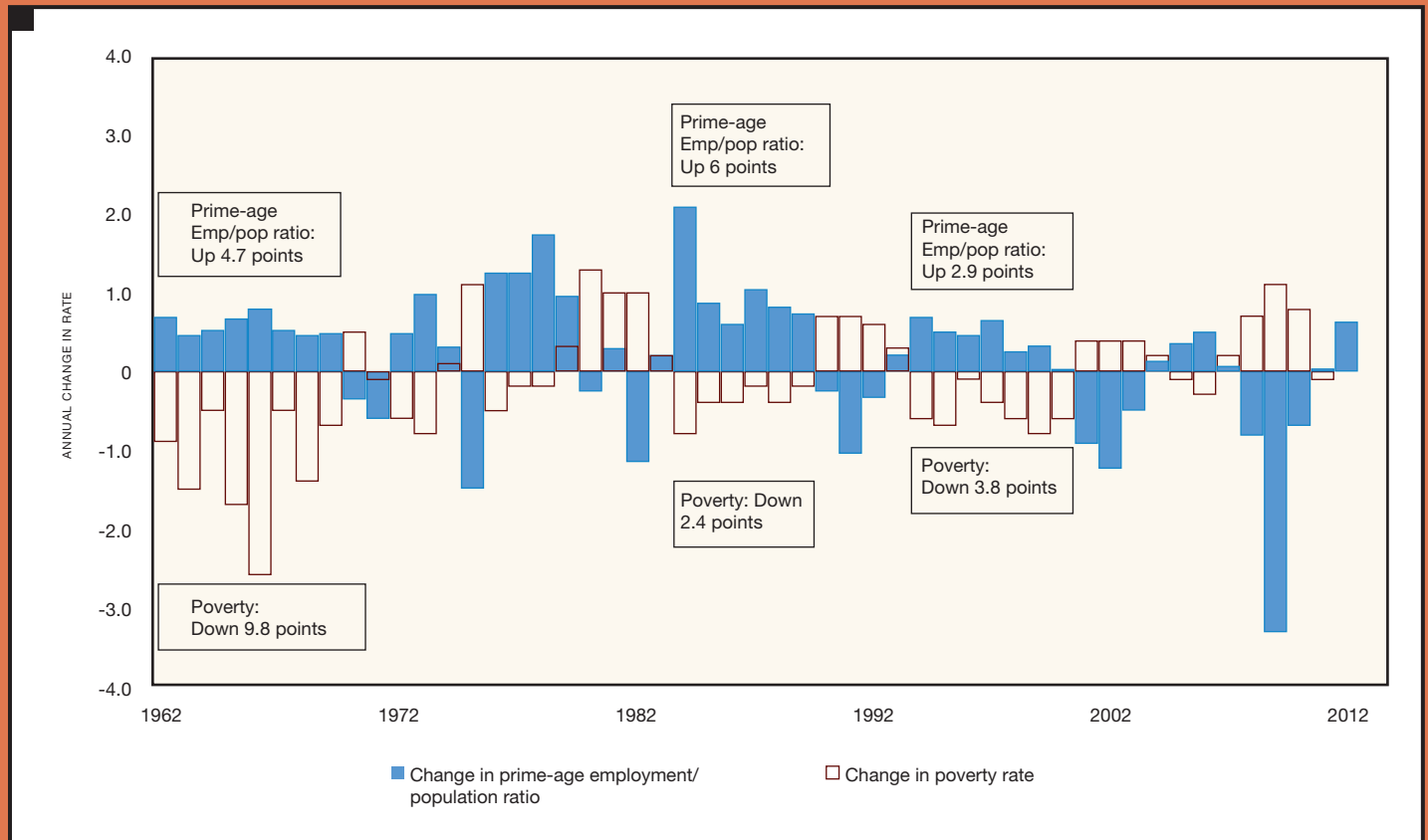


FIGURE 2. Annual Change in Employment and Poverty, 1962–2012



the availability of *skill-compatible employment opportunities*, (c) the extent to which the available jobs provide *adequate wages*, and (d) the extent to which these jobs come with other *employment-conditioned benefits* (e.g., Earned Income Tax Credit) that may compensate for low wages. For each of these conditions, I will lay out the relevant changes and their implications for the strength of the employment-poverty relationship. This discussion is summarized in Table 1.

Unconditional benefits: If nonworking families can acquire benefits that are not conditioned on work, then there's a road out of poverty that does not require jobs or a booming economy. That is, when unconditional benefits are widely available, the macro-level relationship between jobs and poverty will be weakened.

The main development in this regard is the rise and fall of Aid to Families with Dependent Children (AFDC). The growing prevalence of cash welfare benefits in the form of AFDC mitigated the impact of downturns after the 1960s. Just as AFDC reduced poverty during downturns, poverty did not have as far to fall when the downturn ended and the economy turned around.

However, with the elimination of AFDC in 1996, the correlation between the employment rate and poverty should

have strengthened. While AFDC provided cash benefits to low-income and primarily single-parent families with children, the new Temporary Assistance to Needy Families (TANF) program imposed strict work requirements and sanctions for non-compliance, making it harder to obtain when jobs are scarce. In short, the countercyclical effect of cash welfare use has been reduced, meaning that the ability to rely on cash welfare during recessions has declined. As a result, relative to the pre-TANF era, we expect poverty to rise more during economic downturns and to fall more during upturns. Because we haven't observed this pattern, it suggests that other forces must be in play that counteract this expected effect.

Skill compatibility: Why, then, is job growth reducing poverty less than it once did? It's partly because the economy is not delivering the types of jobs that poor people can fill. As David Autor has shown, most of the job growth since the late 1980s has occurred within either the low-skill or high-skill sectors, with a consequent hollowing out of opportunities in the middle.² One reason is that technological advances have led to the automation of (and ultimately to the displacement of) many jobs that involve "routine" tasks. Manufacturing jobs, which used to provide opportunities for workers with moderate levels of edu-

TABLE 1. Sources of Change in the Labor Market–Poverty Relationship

Condition	Change	Effect on Labor Market–Poverty Relationship
Availability of unconditional benefits (e.g., AFDC)	Increased and then reduced availability (via rise and fall of AFDC)	Weakening and then strengthening
Availability of skill-compatible employment opportunities	Employment growth slower for low skilled workers	Weakening
Wage adequacy	Rise of low-pay jobs	Weakening
Availability of conditional benefits (e.g., EITC)	Expansion of EITC	Strengthening (insofar as poverty measure reflects expansion)

cation (such as a high school diploma), have sharply declined. The Great Recession has exacerbated this trend, as employment losses have been most severe in middle-skill jobs, both in the white-collar and blue-collar sectors. The higher prevalence of jobs at the bottom should help the poor, but what's unclear is whether the associated hollowing out in the middle is a countervailing force that increases the competition between the poor and those who had before secured middle-class jobs. All else being equal, this competition may increase unemployment at the bottom of the labor market or lower wages among those who do get jobs.³

“what’s unclear is whether the associated hollowing out in the middle...increases the competition between the poor and those who had before secured middle-class jobs.”

Wage adequacy. Even if a low-skill job is acquired, it won't be poverty-reducing unless it delivers enough in the way of wages (or transfers) to push the recipient over the poverty threshold.⁴ Over the last 40 years, the wages of low-skill jobs have been stagnant for a number of reasons, including, for example, the declining real value of the minimum wage. Between 1975 and 1995, the 20th percentile of the weekly wage distribution declined from \$473 to \$386, resulting in fewer jobs that provided an above-poverty wage. Recent studies have shown that a \$100 reduction in the real weekly wage among workers in the bottom 20 percent of the income distribution reduces the annual probability of escaping poverty by about 15 percent.⁵ The declining payoff to work could also reduce the incentive to work at all, which may in turn lead to a deterioration of skills, further

reducing the likelihood of escaping poverty.

Conditional benefits: The Earned Income Tax Credit (EITC) does of course supplement low wages and should thereby raise people out of poverty. The EITC, established in 1975, provides a tax-based earnings subsidy to low-income workers, which increases the income of low-earners and could counteract a decline in the minimum wage or any decline in wages that accompanies a recession. Because the generosity of the EITC expanded significantly during the early 1990s, one might expect that, over time, the relationship between labor market opportunities and poverty would have strengthened at the macro level, rather than weakened. However, although EITC subsidies have a significant effect on the number of families whose total income falls below the poverty threshold, the EITC does not directly affect the official poverty rate, because EITC income is not counted as “money income before taxes.” This measurement artifact helps explain why the official poverty rate changed so little through the mid-2000s despite the EITC's expansion.

Moreover, as Figure 2 shows, poverty had already become less responsive to economic growth even before the EITC became more generous in 1993. The overall employment growth of 6.2 percentage points during the 1980s was accompanied by a poverty reduction of just 2.4 percentage points, far shy of the 9.8 point reduction in the 1960s.

It follows that the weakening in the aggregate employment-poverty relationship is probably driven by (a) the shortage of low-skill jobs relative to the supply of workers competing for such jobs, and (b) the relatively low earning power of the available low-skill jobs. In the following section, I comment on the policy implications of this change in the employment-poverty relationship, with a particular focus on its implications for policies that seek to reduce poverty by increasing employment.

What's to Be Done?

An antipoverty policy that focuses on jobs and employment will need to be targeted to the current employment regime if it is to have any payoff. A simple policy of “more jobs” has become a less viable poverty solution, but there may be a package of more targeted policies that, taken together, could have substantial poverty-reducing effects.

The first, and especially important, part of this package is to

promote wage growth within the low-skill sector. This might be done by increasing the minimum wage, further increasing the EITC, or through other interventions in the labor market such as skill-enhancing training programs. The second part of this package is a strong unemployment insurance (UI) system, which plays a critical role in reducing poverty associated with recessions because it provides temporary partial-wage replacement to involuntarily unemployed workers, many of whom have incomes near the poverty line. Indeed, because the rate at which UI replaces earnings varies (negatively) with earnings, UI provides relatively greater protection to low-wage workers. In most states and years, UI benefits can be received for a maximum of 26 weeks, but during the most recent recession Congress enacted emergency extensions that increased benefits in most states to 99 weeks. These UI benefits make it possible for families to maintain their prior levels of food consumption (an important determinant of well-being) in the aftermath of a job loss.

The third and final part of this three-pronged package is the continued use of nutrition assistance (SNAP) and other non-cash safety-net programs. These programs have always been sensitive to the business cycle and have become significantly more responsive to economic cycles in the wake of welfare reform. According to recent studies, SNAP benefits have become especially useful in reducing the adverse income impacts of recessions after welfare reform. When poverty measures include SNAP benefits as

income, poverty rates are much lower. For example, the 2009 poverty rate would have been 7.7 percentage points lower if SNAP benefits had counted as income.⁶ Although we do not know whether they are as effective as straight-on cash assistance to the poor, we do know that new countercyclical programs, like UI and SNAP, have become critical poverty-mitigation programs in the current economic regime.

This combination of policies would acknowledge, in a real way, the weakening of the employment-poverty relationship. Will the policies themselves affect the strength of that relationship? They very likely will, but sometimes in opposing ways. That is, some of the proposed policies (e.g., more generous wage subsidies) serve to strengthen that relationship, while others work by providing benefits that are not conditional on having a job (e.g., extended unemployment insurance and a preserved SNAP program) and hence will serve to weaken the employment-poverty relationship. However, by keeping the unemployed out of poverty during downturns, both UI and SNAP help to maintain family well-being in the low-skill sector, which may increase employment and reduce poverty in the long run. ■

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Does Immigration Hurt the Poor?

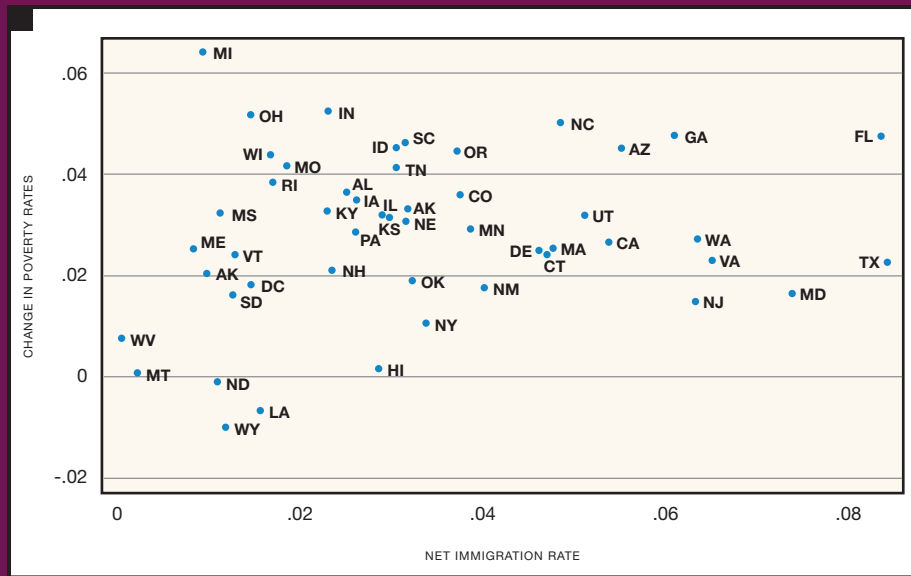
The United States has a famously high poverty rate. In recent years, the Great Recession and the slow recovery have only exacerbated the plight of low-skilled workers in the United States, and the poverty rate would likely have grown substantially during this period were it not for the relatively aggressive stimulus packages. The poverty rate has since remained stubbornly high, even as the recovery plays out. We might therefore pose the following simple, but key, question: Why is there so much poverty in the United States?

It is perhaps natural that immigration receives very close scrutiny by policy makers and the media as a possible important source of this high poverty rate. As the story goes, if the U.S. economy is unable to create enough jobs and pay decent wages to its own citizens, allowing a steady influx of immigrants can only worsen the situation. Many immigrants are unskilled and have continued to flow into the United States over the past decade, with inflows slowing only during the last several years. Moreover, many of these immigrants are undocumented and, as a result, may be hired at lower wages than domestic workers or legal immigrants, putting downward pressure on the wages of those groups. The policy prescription from this economic logic is straightforward: A simple and effective approach to helping the U.S. working poor is to reduce the number of immigrants (or even to deport those currently in the country).

But is this line of thought sound? Does it withstand closer scrutiny of the mechanisms through which immigration is supposed to hurt native wages? And is it supported by the economic data that have emerged in the last decade? As I will argue in this article, the answer to all these questions is a resounding *no*. Economic analysis and empirical evidence suggest that immigration over the past decade was largely inconsequential for native poverty and might have even helped to slightly reduce it in some locations.

BY GIOVANNI PERI

FIGURE 1. Net Immigration and Change in Poverty Rates, U.S. States 2000–2010



Note: Net immigration is defined as the change in the foreign-born population of working age (18–65) between 2000 and 2010 and the total population of working age as of 2000. The poverty rate is the share of people of working age under the poverty line.

Three Important Facts

I address the foregoing questions by drawing on data from the last decade. Why focus on this relatively limited time period? Besides providing the most recent data available, the period includes a phase of sustained economic growth (2001–2006) and of deep recession (2007–2009), thus allowing us to examine the relationship between poverty and immigration within the context of very different economic circumstances. The main attraction of this period, however, is that the time series provide at least superficial support for the claim that immigration causes poverty; in fact, this is precisely the time period that is often featured by those who argue that immigration brings about poverty.

The poverty and immigration time series do indeed move together during this period. Between 2000 and 2010, poverty rates increased significantly in the country as a whole and in most individual states, while at the same time the stock of immigrants continued to rise. The connections between trends in immigration and poverty, however, end here. Three facts that contradict the story of a causal nexus between immigration and poverty rates are worth reviewing in some detail.

No state-level correlation: First, there is no correlation between the inflow of immigrants into states and within-state changes in poverty rates over the 2000–2010 period, as shown in Figure 1. This fact is *prima facie* evidence against an immigration-poverty nexus, but it is not entirely telling. This is because the impact of immigration may not be circumscribed to a state; if natives move out of the state as a consequence of immigration, wage (or poverty) effects may spread. Moreover, other factors may be offsetting a negative effect of immigrants on native poverty, especially economic ones. For instance, states with a booming economy may attract immigrants and experience declines in

poverty at the same time. This will result in a positive (or attenuated negative) correlation between the two, even if immigrants hurt native incomes. Finally, if we are mainly concerned with wage competition for the working poor, aggregate immigration is not the right variable to consider. The skill composition of immigrants is possibly more important than their total number.

The rise of high-skill immigration: Focusing on the skill composition of new immigrants in the United States, a second fact becomes apparent. For the United States as a whole and for most states with substantial immigration (such as Nevada, Arizona, Texas, and Georgia), immigration over the decade was usually balanced between workers with low education (e.g., no diploma) and workers with high education (e.g., college degree). As a whole, immigration has brought to the United States as many or more new engineers, entrepreneurs, and scientists as it has manual, unskilled, and blue-collar workers.

The first type of workers is made up of those who help firms grow, increase productivity, create jobs, and stimulate demand for manual and blue-collar jobs. Because highly skilled immigrants typically locate in the same areas as less-skilled immigrants, states and cities with large immigration inflows were likely to experience increases in demand, productivity, and opportunities together with increases in their supply of workers.

A small effect at best: This leads us to the third fact that makes immigration an unlikely cause of increased poverty among natives. When we combine the positive effect of immigrants on the economy with their competition effect on natives, even with simple labor market models the wage effects are quite small. This is because immigrant flows into the economy have been balanced across skill levels and are generally quite small relative to the size of the native labor force.

The balance of this article will be devoted to describing the logic of these labor market models and the results secured under them. The main conclusion of these models is that any rise in poverty rates among native workers over the last decade cannot be blamed on immigration. To the contrary, in some localities, particularly those with large inflows of highly educated immigrants, there may have been faster economic growth and expanded opportunities available to the working poor.

The Role of High-Skill Immigration

It is useful to turn now to this more formal treatment of how skill differentiation can alter the effects of immigration. The starting point is to document the often-unappreciated role of high-skill immigration in the U.S. case.

Table 1 shows the net inflow of immigrants between 2000

Table 1. Immigration Rate, by Education Group, 2000–2010. Representative Immigration States and the U.S. Total

State	No Diploma	High School Diploma	College Education	College Degree	Total Immigration Rates 2000–2009
Arizona	9.7%	7.6%	5.8%	9.3%	7.8%
California	-1.2%	3.2%	5.3%	9.8%	4.6%
Florida	2.0%	5.2%	8.3%	11.1%	6.8%
Georgia	7.9%	4.0%	4.7%	7.5%	5.6%
Nevada	21.7%	8.7%	12.0%	16.0%	12.6%
New Jersey	0.5%	1.9%	5.9%	9.1%	4.8%
New York	0.6%	-0.7%	3.7%	6.4%	2.4%
Texas	11.0%	5.5%	6.3%	8.9%	7.5%
United States	2.8%	2.6%	4.0%	4.8%	3.5%

Note: Immigration rates for each group are calculated as the change in the number of foreign-born aged 18–65 in the group during the decade 2000–2010 as percentage of the number of people aged 18–65 in the group as of the year 2000.

and 2010 as a percentage of different skill groups in eight “high-immigration” states and in all of the United States. Over that decade, the total net inflow of immigrants, or the total “immigration rate,” was equal to 3.5 percent of the U.S. population in 2000, as shown in the table’s last row. Each column of the table, then, shows the immigration rate specific to a group, defined according to its educational attainment. We report, from left to right, the percentages pertaining to those with no diploma, a high school degree, some college education, and a college degree. The national immigration rate was 2.8 percent for workers with no degree, 2.6 percent for workers with a high school diploma, 4.0 percent for those with some college education, and 4.8 percent for workers with a college degree.

Labor economists emphasize that workers with similar skills (as determined by their education levels) tend to compete for similar jobs and can be considered a homogeneous group. By contrast, workers with different skills do not compete for similar jobs, and in fact tend to perform different and interconnected productive tasks within firms. For example, an increase in the number of foreign-born college-educated engineers does not increase competition for native construction workers, but instead increases their job opportunities and productivity because construction workers are needed to implement the projects of engineers.

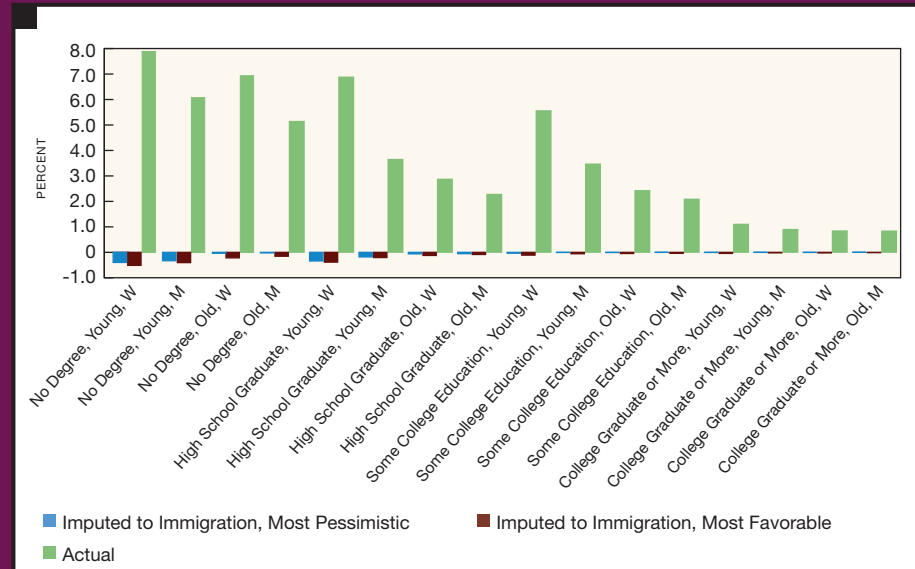
This concept is called *complementarity* between workers. Where there are more engineers, they are likely to create and expand firms, in turn generating opportunity to employ more construction workers. Firms will compete for their labor and may therefore pay better wages. If we focus on the immigration rates among the less educated in states with large influxes of immigrants (e.g., Arizona, Nevada, Texas, or Florida), we notice that those same states also experienced high immigration rates for the college educated (see Table 1). It follows that immigration may actually increase demand for less-educated natives because the receiving states tended to welcome both less-skilled immigrants and college-educated professionals, and because the latter provided a “stimulus” to local economies, especially to local labor demand.

How much did the extra supply of college-educated and other immigrants translate into extra demand for native jobs rather than competition with native workers? This depends on the types of productive interaction among members of different skill groups. For instance, if one extra engineer generates demand for several extra construction workers, and if the growing share of college-educated workers leads to the adoption of better technologies and enhances local learning, then the local effect of immigration on the wages of less-educated natives could be positive and quite large. Also, immigrants and natives may take different jobs even when they have the same educational level, which can generate gains from specialization. Another possibility is that natives will move into or out of a state or city to take advantage of productive opportunities, a possibility that also must be incorporated when formally evaluating immigration’s effects.

A Formal Model of the Effects of Immigration on Native Poverty

These mechanisms can be represented with widely used models that have been employed by economists for years.¹ These models allow native and immigrant workers with different education and experience to fill different jobs. They then evaluate how the change in supply of each group of workers affects the productivity and wage of each other group, based on estimates of the wage response of each group to the change in supply of others. Using such a model, we estimate the percentage changes in poverty rates due to immigration’s effects on the labor market. Figure 2 summarizes the changes in national poverty rates over the period 2000–2010 for four basic education groups, for women (W) and men (M), and for younger (under 40 years) and older (40 years and over) workers. As there is some disagreement in the economic literature on the exact wage response of each group, we report the results obtained using most optimistic parameter estimates as blue bars, and those obtained using the most pessimistic estimates as red bars. We also report the actual percentage changes in poverty rates for each group as green bars.

FIGURE 2. Change in Native Poverty Rates, 2000–2010, by Skill Group



Note: The imputed effects are calculated considering the competition and complementarity effects of immigrants nationally on native wages, and comparing poverty rates of natives with or without these effects.

Three results stand out. First, the actual percentage changes in poverty rates are substantially greater than the changes attributed by labor market models to the effects of immigration, even taking into account the most pessimistic estimates reported by economists. The actual increase in poverty rates for women with no degree, both younger and older (the two most-affected groups), was between 7 and 8 percent, while the changes due to immigration's effects for these same groups were -0.5 and 0.1 percent. Second, the effects of immigration for the most pessimistic and most favorable estimates are small and do not differ much from each other across all education levels, age groups, and gender. Third, the labor market model implies that immigration reduced the poverty rates for young native workers with no degree, albeit only slightly. This reduction can be attributed to jobs and production created by highly educated immigrants, an effect that more than compensates for the competition generated from less-educated immigrants.

Conclusions

There are all manner of debates about why the United States has so much poverty. But one frequently advanced account is that immigrants to the United States flood the low-skill labor market, drive down wages within that market, and create much poverty as a result. It is worth asking whether the evidence accords with

this account.

The simple conclusion laid out here: It does not. Immigration brings to the United States new workers, skills, human capital, and ideas. It increases the labor supply, and because new immigrants expand firms, generate innovation, become entrepreneurs, and promote specialization, it also engenders a larger set of broader economic opportunities. Between 2000 and 2010, immigration was particularly suited to “stimulate” the economic opportunities of the U.S. working class, in part because the immigration rate was highest among the highly educated. Moreover, immigrants of all skill levels co-located in the same destinations, together delivering a push to expand the local economy and, possibly, bringing benefits to the native working poor. Although the Great Recession still increased, sometimes substantially, the poverty rates of less-educated Americans, we find no evidence to support the claim that these increases in poverty rates were the result, in total or in part, of immigration. ■

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Endnotes

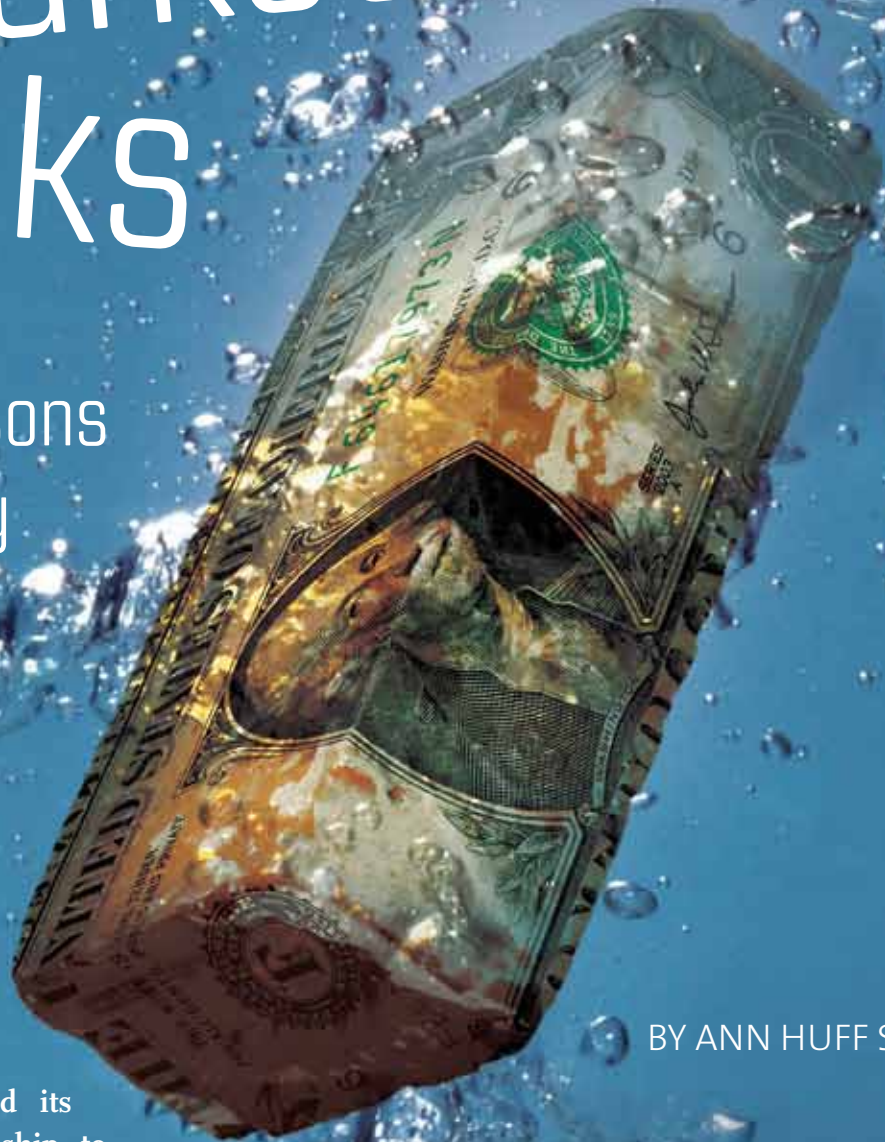
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Labor Market Shocks

Are There Lessons
for Antipoverty
Policy?

BY ANN HUFF STEVENS

The Great Recession and its aftermath brought hardship to many American families; its full toll will likely not be realized or documented for many years to come. More than 8 million workers lost their jobs during the recession, experiencing dramatically reduced income, increased stress, and a variety of other negative outcomes for themselves and their families.



These effects are important to document and understand in their own right, but they also offer important lessons in how low or variable income may affect the well-being of children and adults in a more general sense—lessons with important implications for antipoverty policy. What are the effects of job loss, and what does that tell us about the lasting effects of low income more generally?

The research on the broad question of the effects of limited income has developed and advanced in recent years in ways that have not been fully appreciated by politicians, policymakers, and the public. Here, I will focus on the effects of job loss on future earnings and a host of other outcomes. Because jobs of course provide earnings, one can gain some leverage on whether money matters for later life outcomes by asking how much the loss of a job matters. The Great Recession provides an important experiment in this respect because—unfortunately—it delivered much in the way of job loss. It reminds us yet again that even those faring well in the labor market in one year can see fortunes change when the economy weakens. The seemingly random shock of a recession-induced job loss can go a long way toward identifying the true effect of losing a job and the income it provides.

The profoundly negative effects of job loss on individuals and families are quite well documented in academic work. I will review evidence accumulated by social scientists over the past two decades that makes clear that the negative income

experience of losing a job. By studying these effects, we can not only better understand how recession and job loss affect current and future generations, but we can also speak to critical policy questions concerning how low or uncertain income affects the well-being of adults and children.

Longitudinal Analysis as the Key Breakthrough

What accounts for this recent growth of knowledge about the effects of job and income loss? The rise of longitudinal analysis is one of the key breakthroughs in this regard.

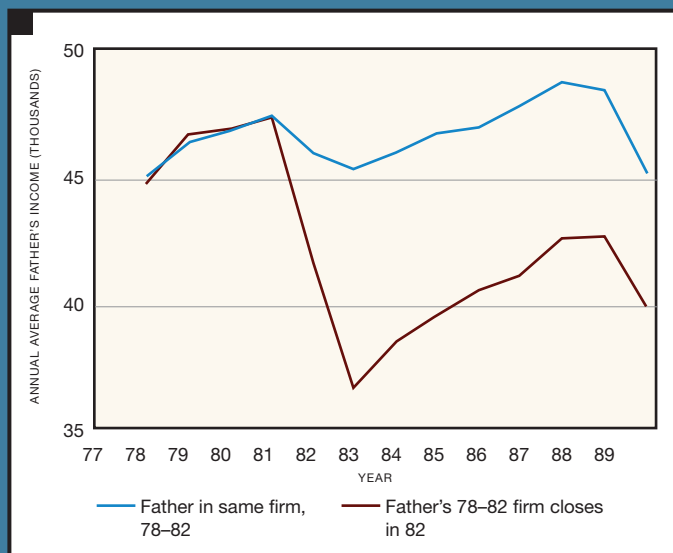
Although the effects of job loss on income have been studied for decades, in the 1990s longitudinal data became more widely available, enabling analysts to carefully document the persistence of reduced earnings and income that follow job loss over the long haul. Earnings fall steeply when people lose jobs, but even once new jobs are found, average earnings remain below—and sometimes far below—what they were before the initial losses. As time moves on, earnings and family income will recover somewhat, but the research shows that even in the sixth year following a job loss, average earnings are at least 10 percent lower than their starting point.¹ During a deep recession, when a great number of people experience job loss, long-term reductions in earnings may be as high as 25 percent. Although spouses' earnings and other income sources may increase to compensate for the reduced earnings of affected family members, these offsetting increases end up being relatively small contributions to total family income. In Figure 1, I have charted the steep income loss among fathers experiencing a firm closure (and hence job loss) in the early 1980s in Canada, a time when both the Canadian and U.S. economies were undergoing severe recessions.

Recessions Provide More Information on Effects

That job loss frequently leads to sizable and permanent changes in the family income of those affected may not be all that surprising. But job losses also indirectly affect other long-term outcomes, including health outcomes like mortality. I will discuss these indirect effects in more detail shortly, but first I discuss how recessions, in conjunction with longitudinal analysis, have provided much help in identifying the true causal effect of jobs and income. Although recessions may have little redeeming value in general, I will argue that they do at least provide some analytic leverage on the question of the effects of job and income loss.

If we want to understand how income or material resources affect families and children, job loss provides one important vehicle to do so, as families and children will typically experience dramatic change in income when a job is lost. But does an empirically observed job loss tell us much about its true causal effects? Typically, economists and other social scientists are careful to distinguish between correlation and causation. It is generally difficult to claim, for example, that the low income of parents *causes* any possible academic troubles among their children, because the background characteristics that led to their low income may have also caused academic difficulties.

FIGURE 1. Effects of Job Loss on Income



“surprises” that come from permanent job loss have large and persistent effects. This result suggests that long-term exposure to low and uncertain income may have similar negative effects. As mentioned above, the persistence and breadth of these effects have not been well appreciated by policymakers, nor perhaps by citizens who have not themselves been through the unfortunate

For example, parents who are at risk of job loss are more likely to live in poor neighborhoods, and schools in poor neighborhoods may be of low quality and raise the chances of academic difficulties. However, studies of job loss provide a potential way around this problem, because we can observe families prior to job loss (when they have higher income) and can then study how the *change* in income, presumably driven by forces outside the family, leads to changes in other outcomes, such as children's achievement.

The obvious caveat: This causal inference will be warranted only if the job loss itself is not associated with individual characteristics that might also lead to worse outcomes for parents or kids. For example, a working parent may suffer a major health problem, such as depression, that leads to job loss. And while this parent's income does drop, it may be the deterioration in parental health that leads to negative outcomes for children, rather than the drop in income per se.

This is precisely why recessions are so useful for purposes of research. In particular, studying job losses that occur as part of broad economic downturns, firm closings, and mass layoffs makes it less likely that individual workers have been selected for dismissal for reasons that might also account for the outcomes of interest (e.g., children's academic achievement). In addition, we can often measure outcomes for the same individuals both before and after a job loss, sometimes even accounting for typical trends in those outcomes and, in this way, track the change in income to the change in outcomes. These approaches have helped establish that the long-term reductions in earnings are caused by job loss, and the same approaches can help tie the associated earnings reductions to changes in health, educational, and other outcomes.

This job-loss approach to exploring the effects of income is not without some problems. On the one hand, it may be that the sharp changes in family circumstances, or the uncertainty introduced by the need to find new employment, extend beyond the stress or lack of resources associated with low but stable incomes. This suggests the causal effects of job loss might overstate the causal role of income. For example, if the children's academic success falls following a job loss because a parent can no longer afford the child's private school, academic success could still rebound over a longer time span as the parent adapts to his or her newly low income. On the other hand, families with a previous history of higher, stable income may have assets and savings that make them better able to compensate for even permanent reductions in income, such that job loss could understate responses to low income when such resources do not exist.

The Wide Span of Consequences

With the preceding detour into methods of research that help establish causality, we are now in a position to lay out the wide span of consequences of job and income loss. And the span of consequences is indeed wide.

First, there is strong evidence that job losses lead to substantive changes in health outcomes for affected workers. Job losses from mass layoff events result in increases in mortality among

laid-off workers over the next several decades. Important work by economists has followed workers who lost jobs as part of mass layoffs in the recessionary periods of 1980s Pennsylvania.² Among workers who lost jobs, the risk of death increased by 10 to 15 percent per year over the next 20 years. What leads to these increases in mortality? Here we know less, but there is evidence that the greater the income loss and the greater the variability of income after a job loss, the larger the increase in mortality.

Other studies have examined health after a job loss, but over a shorter time frame. Among the best of such studies, there is evidence that many conditions that are likely related to higher stress, including both physical and mental health problems, increase substantially in the years following a job loss.³

The effects of job loss extend beyond the person directly affected. Income losses, after all, are shared with the entire family. In this sense, the effects of economic shocks on children may shed some light on why low incomes might have causal effects that extend well into the next generation. For example, we know that kids whose parents have lost jobs are more likely to experience difficulties in school, such as being expelled or needing to repeat a grade.⁴ At the aggregate level, researchers have shown that local firm closings can lead to reductions in school-level test scores, presumably reflecting the cumulative effects of many parents located in a single district experiencing economic stress.⁵

We also have evidence that effects of job losses on kids are extremely persistent. A study of Canadian parents who lost jobs in the 1980s found that their children had substantially reduced earnings when they were tracked down in young adulthood, with earnings roughly 9 percent below that of comparable kids whose parents had not experienced a job loss.⁶ Such research suggests that labor market shocks can haunt the children of affected parents even into their own adult lives.

It also seems, though, that families in precarious financial situations *before* a job loss may be those most likely to be harmed when a job loss occurs. Some of the studies that looked at the effects of job loss on children have also examined whether the effects of job losses differ depending upon where in the distribution of income or socioeconomic background families start out. Job losses among families that begin with relatively high incomes are often found to have smaller effects than those occurring among those closer to the bottom of the income distribution. This points to potential non-linearities in the relationship between income and a host of associated individual and family outcomes. Put differently, a dollar transferred to middle-class families may not have the same effects as a dollar transferred to lower-income families.

A weakness of older studies that attempted to find a causal relationship between income and children's outcomes is precisely this failure to consider such non-linearities. But some studies have been large enough to look at effects on different segments of the population. For example, most of the effect of firm closures on the eventual adult earnings of affected children in the Canadian study was driven by families who started out in the bottom quarter of the earnings distribution.

What Does It Mean for Policy?

The evidence that job and income loss matter for many outcomes is compelling. A broad academic literature has come to understand the long-term, negative consequences that employment shocks have on affected workers. This evidence that job loss affects the income, health, and achievement of current and future generations speaks to the key role of income in helping or hurting poor families. The simple conclusion here: The loss of income and material resources does cause harm and suggests that income support and stability can play a role in reducing the long-term consequences of poverty.

Can we make more specific policy recommendations on the basis of such evidence? The instinct of course is to target policy precisely to causes. If, in other words, the loss of money is causing bad outcomes, then it might be argued that income assistance is the only or best type of intervention needed to improve the fortunes of poor families.

The latter conclusion, attractive though it may seem, ought not be reached unthinkingly. Better education policies, for example, may still be a more efficient and effective remedy to poor children's long-term disadvantages. What we can conclude, however, is that we need to undertake policies that—either directly or indirectly—address the key role that the lack of money plays in producing all sorts of bad outcomes.

The next step is to assess whether direct or indirect approaches to raising income are more likely to have payoff. All else equal, most would probably prefer approaches that provide a human capital foundation for raising income, as these will have enduring effects. It has to be appreciated, however, that policies promoting the development of human capital are sometimes

just not enough. However much we ramp up human capital and make people more employable, we will still have far too much poverty, in part because market economies are intrinsically cyclical and have frequent periods of “creative destruction” in which many workers will lose their jobs. In the contemporary U.S. economy, less-skilled workers also face ongoing downward pressure on their wages because of global competition, skill-biased technical change, and other broad economic changes.

The long-term effects of job loss are really a combination of relatively short-term disruptions in employment and much longer-term reductions in wage levels even after workers are re-employed. It follows that policies to increase human capital are not the full answer for either displaced workers or the poor in general. We must also have policies that provide short-term assistance to individuals facing short-term difficulties for a variety of reasons. We know that income loss and stress associated with job loss have real consequences for individuals and their families. While those in chronic poverty may well have additional challenges, including the need to build their underlying skills or stock of human capital, what we have learned about the effects of job loss make it difficult to argue that effective income support policies should play no role in improving the lives of the poor. ■

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A Revolution in Poverty Policy

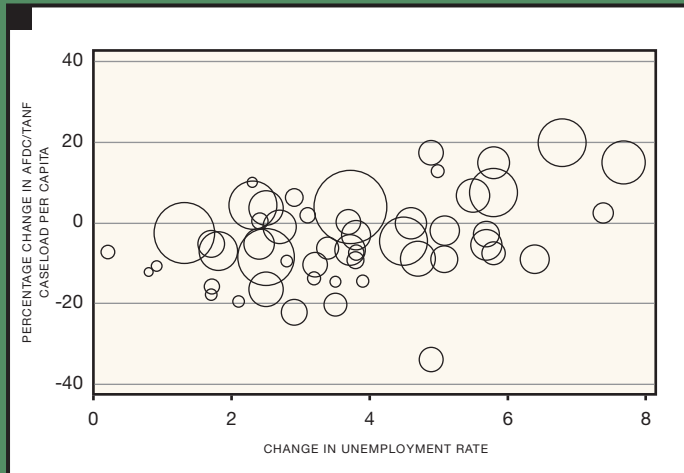
The Earned Income Tax Credit
and the Well-Being
of American Families

BY HILARY W. HOYNES

Over the past 20 years, the safety net for families with children in the United States has been fundamentally transformed. The 1996 welfare reform led to a dramatic reduction in the amount of state cash assistance and to the elimination of the Aid to Families with Dependent Children (AFDC) program. At the same time, the amount of cash assistance given through the U.S. tax system increased substantially with the Earned Income Tax Credit (EITC).

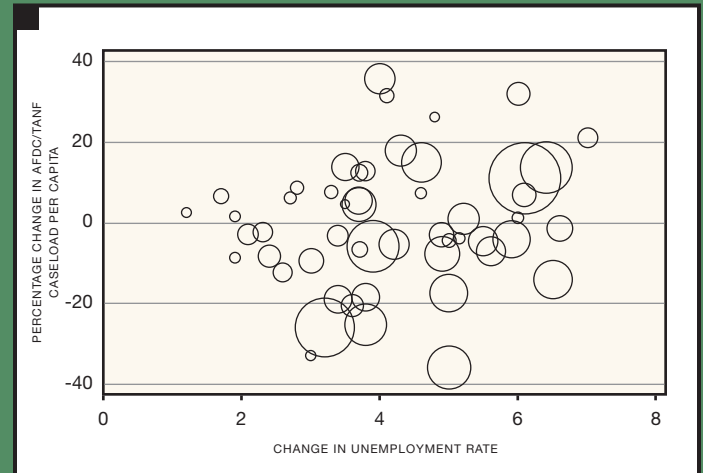
FIGURE 1. Change in Unemployment Rate and Percent Change in per Capita AFDC/TANF Caseloads Across Labor Market Contractions, by State, for the (a) 1979–1982 and (b) 2007–2009 Recessions

Cash Welfare (AFDC) and Unemployment Rate Change Between 1979 and 1982



NOTE: The sizes of the circles correspond to the state population.

Cash Welfare (TANF) and Unemployment Rate Change Between 2007 and 2009



The net result is an almost complete shift in the U.S. safety net for low-income families with children from *out-of-work* assistance to *in-work* assistance. In the midst of the slow recovery from the Great Recession, the EITC is now the largest cash transfer program for low-income families with children. The EITC cost roughly \$59 billion in 2009, as compared with the \$9 billion in Temporary Assistance to Needy Families (TANF) cash payments from the program that replaced AFDC.

Because the EITC now plays a central role in the functioning of the modern safety net, it is important to assess how it affects the work, income, poverty, and well-being of children and families in the United States. The remainder of this article addresses each of these issues in turn.

The Decline of Welfare

From the 1930s to the 1990s, the AFDC program provided cash assistance to low-income single mothers with children. The program was designed to provide an income transfer for needy families in an era when women with children had minimal labor market attachment. Consequently, AFDC benefits provided a basic income floor, with the benefit then reduced by a dollar for every dollar increase in earnings. Because the “dollar-for-dollar” phase-out of benefits acted like a 100 percent tax on earnings, it should not be surprising that it led to a reduction in work. Although this feature created a targeting of benefits to those with the lowest income levels (by design), it also created a disincentive to enter the labor force because increases in earnings were offset by reductions in the cash transfer.

After 60 years with minimal changes, President Clinton made good on his pledge to “end welfare as we know it,” sign-

ing the 1996 federal welfare reform legislation and thereby eliminating AFDC and replacing it with TANF. TANF, or welfare as we know it now, imposes stringent work requirements, sanctions for noncompliance, and lifetime limits on how long welfare can be received. Importantly, the imposition of time limits essentially ended the entitlement nature of cash welfare for poor families with children in the United States.

As a result, the number of families receiving cash welfare has fallen to historic lows—from a peak of 5 million in 1994 to 1.7 million in 2007 on the eve of the Great Recession. A central tenet of safety net programs is that usage rises in times of need. Yet TANF caseloads have risen only minimally, despite the massive increases in unemployment resulting from the Great Recession. Figure 1 illustrates the changing role of cash welfare by contrasting the response of welfare caseloads in the 1979–1982 and 2007–2009 recessions. The graph plots, for each state and each recessionary period, the percentage-point change in the unemployment rate on the x-axis and the percent change in the AFDC or TANF caseloads on the y-axis. Each circle on the graph represents a state, with the size of the circle corresponding to the state population. Figure 1a shows that in the 1979–1982 recession (pre-welfare reform), states experiencing more severe increases in unemployment had larger increases in their AFDC caseloads than states experiencing less severe recessions. Figure 1b, however, shows that changes in TANF caseloads during the Great Recession (after welfare reform) are almost everywhere lower (and for many states even show *declines* during this significant period of need), with no discernible relationship with the severity of the recession.

The Rise in the EITC

The EITC provides a cash transfer to low-income working families through the federal tax system, rather than through the state welfare system. The EITC is a refundable credit so that a taxpayer with no federal tax liability, for example, would receive a tax refund from the government for the full amount of the credit. The EITC acts as an earnings subsidy for low earners; a family with one child receives 34 cents for every dollar of earned income, while a family with two or more children receives 40 cents for every such dollar. To become eligible for the EITC, a person must demonstrate positive earned income, as well as adjusted gross and earned incomes below a specified amount. In tax year 2012, the credit topped out at \$3,169 for families with one child, \$5,236 for two or more children, and \$5,891 for families with three or more children. Eventually, the credit is phased out, though at rates much lower than those under the AFDC program. The EITC is now widely utilized—in 2009, 27 million filers received the EITC, a number far greater than the 12.5 million who filed in 1990.

The net fiscal result of the decline in welfare and the expansion of the EITC is illustrated in Figure 2, where trends in real 2009-dollar per capita spending are documented for the three main cash or near-cash assistance programs for families with children in the United States: AFDC/TANF, the EITC, and the Supplemental Nutritional Assistance Program, or SNAP (formerly the Food Stamp Program). For reference, the gray shaded areas indicate official recessionary periods (annualized), and the black vertical line denotes the passage of federal welfare reform. Overall, the cash-based safety net (AFDC/TANF) has shrunk considerably, while the tax- and noncash-based safety net has grown. The cost of the EITC more than tripled in less than 10 years, while TANF payments have almost disappeared. Also notable is the remarkable role of SNAP in the current recession—the number of persons receiving food stamps has more than doubled between 2003 and 2011. The most recent estimates show that about one in seven persons is currently receiving SNAP.

Welfare-to-Work and the EITC

With welfare reform and the expansion of the EITC, the end result is an almost complete shift in the U.S. safety net from *out-of-work* assistance to *in-work* assistance for low-income families with children. This has resulted in a tremendous change in the work incentives faced by low-income women with children. Implementation of welfare reform (“the stick”) and the expansion of the EITC (“the carrot”) were expected to increase the labor force participation of single mothers. This is exactly what happened. Figure 3 presents, for 1980 to 2010, the percent of women ages 20–58 who worked at all during the year, broken down by single women heading families with children, married women with children in their families, and single women without children in their families. Between 1992 and 2000, the employment of single women with children rose by a stun-

ning 15 percentage points. In comparison, changes were only minimal for the other groups of women (or any group of men). Although this increase in employment among single women with children was partly driven by the strong labor market of the late 1990s, the best available research shows that it is also the result of the welfare and EITC policy changes during that period.¹

Where Do These Reforms Leave Needy Families?

With the decline of welfare and the rise in the EITC, the Great Recession provides our first test of how the safety net is faring after welfare reform. How are we doing? Figure 3 showed that, despite the high overall unemployment rates in the Great Recession, the employment rates for single women with children remain above their pre-welfare reform levels. This, however, gives us an incomplete picture of how families and their children are faring. Given the intent of the safety net to increase incomes at the bottom of the distribution, poverty rates are natural measures to examine in assessing whether the safety net is working. If poverty has risen in the Great Recession, how have these changes to the safety net affected poverty among vulnerable families? Put more pointedly, how many people does the safety net remove from poverty?

According to the official poverty statistics, the answer is “none.” The official poverty measure was developed in 1963 and defines a family’s “resources” as equal to their cash, pre-tax income. A family is defined as poor if their resources are below a certain threshold that depends upon the size of their family. Because the official measure relies on a family’s *pre-tax cash* income, the expansion of the EITC and SNAP are not counted as part of family resources and thus are not reflected at all in the official poverty statistics. Thus, as the United States has shifted the safety net away from cash assistance and toward tax and non-cash assistance, our official poverty statistics have become less relevant.

With much fanfare, the Census Bureau recently launched the new Supplemental Poverty Measure (SPM), a measure that is more useful in assessing how the safety net has performed. The SPM is not a replacement for the official poverty measure, but instead an additional measure to be released each year. The new supplemental poverty measure makes several key changes in how we classify individuals as poor. First, in-kind government benefits, such as SNAP, housing assistance, and other nutritional assistance, are included as “income” under the new measures. Second, a family’s income is adjusted for federal tax payments, including deducting payroll taxes and adding tax credits (importantly, the EITC). Third, out-of-pocket medical and work expenses are deducted from income. Fourth, the new measure makes adjustments for differences in the cost of living across geographic areas.

The net result is that the overall rate of poverty is slightly higher using the new measure: in 2010, the official poverty measure reports 15.1 percent of persons are poor, and the sup-

FIGURE 2. Per Capita Real Expenditures for AFDC/TANF, Food Stamps, and the EITC (2009 dollars)

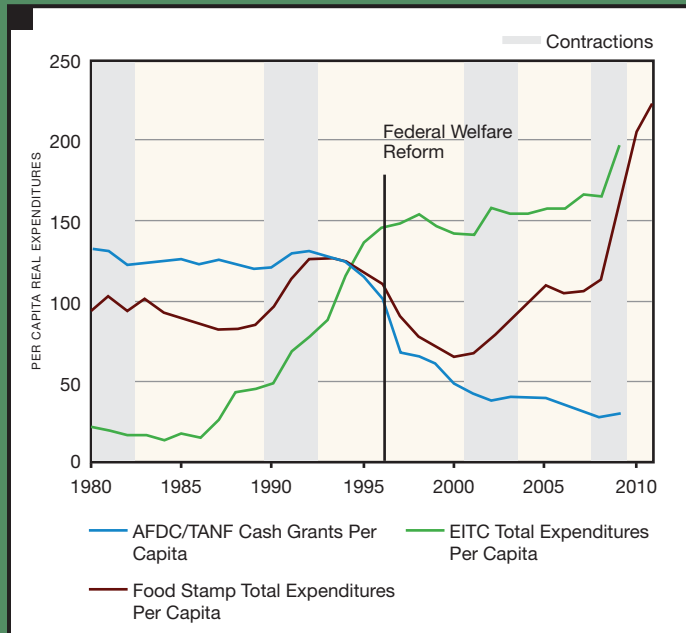
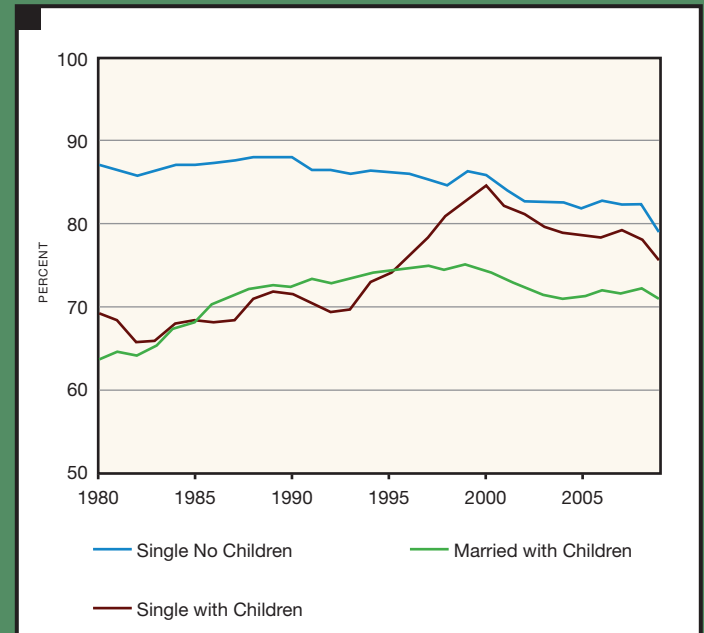


FIGURE 3. Percent of Women Working, by Marital Status and Presence of Children, 1980–2009



plemental poverty measure reports that 16.0 percent are poor. Poverty rates for some groups change substantially. The poverty rate for children falls from 22.5 percent to 18.2 percent, reflecting their greater use of the noncash safety net. Poverty among the elderly, on the other hand, rises from 9 to nearly 16 percent, primarily because of their high out-of-pocket medical costs.

By updating poverty measurement to accurately and comprehensively capture the noncash and tax forms of government assistance, there is now an official measure that can be used to evaluate the success of the safety net. To illustrate the importance of the new measure, Figure 4 plots the fraction of persons who are poor, contrasting the official poverty measure to an alternative poverty measure that closely matches the supplemental poverty measure.³ The period shown in the graph, 2007 through 2010, is particularly important given the steep increase in unemployment rates that characterized the Great Recession. Between 2007 and 2010, the official poverty rate increased by 2.6 percentage points, from 12.5 to 15.1, while the unemployment rate increased from 4.6 to 9.6. However, the supplemental poverty measure stayed amazingly flat, increasing from 15.3 percent in 2007 to 15.5 percent in 2010. These data show that the safety net is working.

To explore more fully which programs are providing the protection revealed here, Figure 5 presents data based on the Census report accompanying the release of the supplemental poverty measure. We report on how the changes contained in the supplemental poverty measure affect the total count of poor

children. From this, we can obtain estimates of the total number of children who a given program removes from poverty. The figure shows that the EITC removes more children from poverty than any other program: in 2010 the EITC raised 3.1 million children out of poverty. The second most important child anti-poverty program is SNAP, which raises 2.2 million children out of poverty. Among Americans of all ages (not shown in the figure), the report shows that the EITC lifts more than 6 million persons out of poverty, while SNAP lifts more than 5 million persons out of poverty.

Concluding Reflections on the EITC Revolution

The EITC has become the cornerstone of U.S. anti-poverty policy and has transformed the experience of poverty in the United States. It is the vehicle through which the U.S. safety net has been refocused on *working* families; it is the largest cash transfer program for low-income families with children; it has dramatically increased employment among single women with children; and it now removes more children from poverty than any other program.

The effects of EITC extend well beyond simple income support and poverty reduction. By increasing the income of poor families, it generates additional spending and hence “downstream” economic effects.³ It leads to various improvements in the mental and physical health of mothers.⁴ It brings about a reduction in low birth weight among infants.⁵ And it improves the performance of children on cognitive tests.⁶ This burgeon-

FIGURE 4. Official Poverty and Alternative Poverty, 2007–2010.

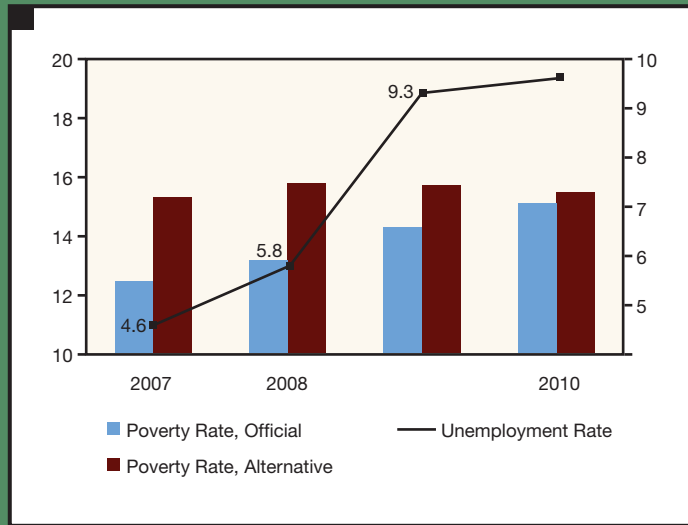
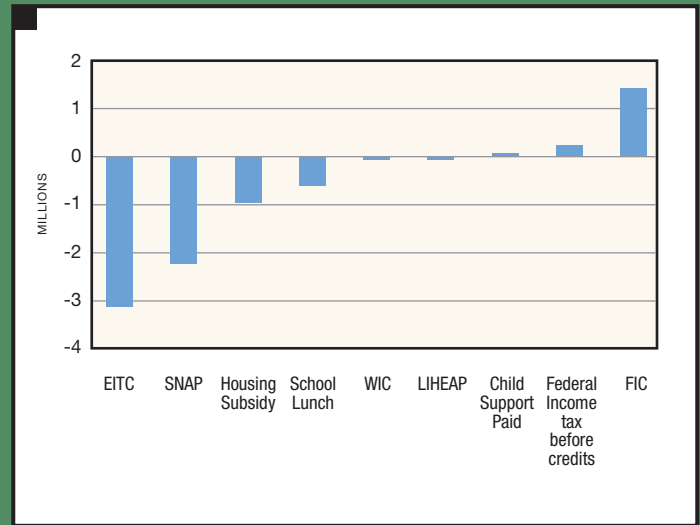


FIGURE 5: Effect of Tax and Noncash Benefits on the Number of Poor Children, 2010 (in millions).



ing body of work suggests, then, that income support programs have benefits that extend well beyond an increase in cash flow for families in poverty. And these benefits of EITC in turn accrue not only to the recipients themselves, but also indirectly to taxpayers who are relieved of the burden of subsidizing the health costs of those in poverty and who benefit from the burgeoning economy and growing tax rolls that the EITC brings about.

The EITC, clearly the cornerstone to the country's "second war" on poverty, may ultimately be judged one of the most successful labor market innovations in U.S. history. Grounded in

a simple (rational action) behavioral model, it has had powerful effects on labor market behavior and on poverty, effects that were for the most part intended and built directly into the program's incentive structure. ■

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2. The supplemental poverty measure is available only beginning in 2010. In prior work, we constructed an alternative poverty measure that closely resembles the supplemental poverty measure, and is available back to 1980. For the purposes of this figure, it is necessary to use the alternative poverty measure in order to trace poverty through the recession. For details on this measure see: Bitler, M., and Hoynes,

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4. Evans, W., & Garthwaite, C. (2010). "Giving Mom a break: the impact of higher EITC payments on maternal health" (NBER working paper 16296). <http://www.nber.org/papers/w16296.pdf>.

5. For example, see: Hoynes, H., Miller, D., & Simon, D. (2012). "Income, the Earned Income Tax Credit, and infant health" (NBER working paper 18206). <http://www.nber.org/papers/w18206>; and Strully, K. W., Rehkopf, D. H., & Xuan, Z. (2010). "Effects of prenatal poverty on infant health: state Earned Income Tax Credits and birth weight," *American Sociological Review* 75(4), 534–562.

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The Rise of Extreme Poverty in the UNITED STATES



BY H. LUKE SHAEFER
AND KATHRYN EDIN¹

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

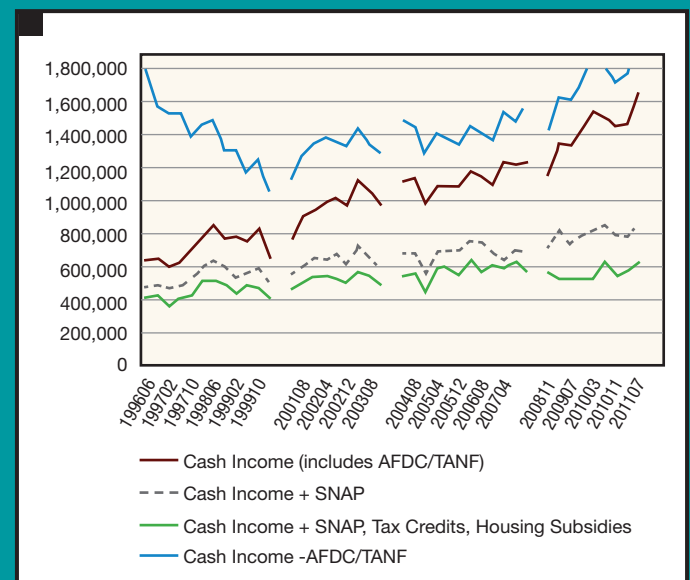
households. It follows that 1.17 million children were in extreme poverty in mid-2011 under our most conservative measure (see Table 2).⁵

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

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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.