

Exploring Options to Improve the Supplemental Nutrition Assistance Program (SNAP)

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The Supplemental Nutrition Assistance Program (SNAP), previously known as the Food Stamp Program, is a cornerstone of the U.S. safety net. SNAP provides means-tested electronic vouchers that can be used to purchase most foods at participating retail outlets and helps low-income families afford the food that they need. It also helps to stabilize the economy in fiscal downturns, because more benefits are paid when jobs and income are scarce. SNAP households range widely in their demographic characteristics, from those with elderly or disabled members, to prime-age families (typically with children) who combine work and benefit receipt, to those with no or very low levels of income. Potential reforms, such as policies to encourage work or improve dietary outcomes, may have different impacts on various subgroups and should be designed with the heterogeneity of the caseload in mind. I review the theoretical and empirical research literature on SNAP's impacts and consider potential reforms by analyzing them in terms of the program's stated goals.

Keywords: SNAP; supplemental nutrition assistance program; food stamp program; safety net; nutrition assistance; means tested programs

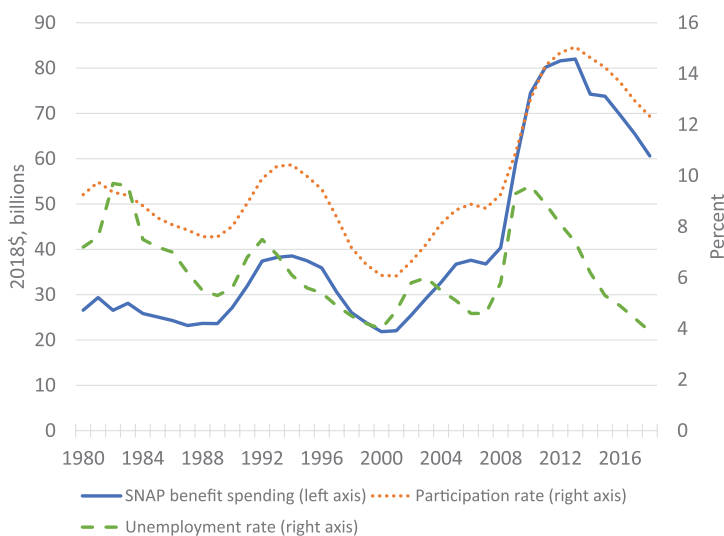
The Supplemental Nutrition Assistance Program (SNAP), previously known as the Food Stamp Program, is a cornerstone of the U.S. safety net. SNAP is the only social benefits program universally available to low-income Americans, and in 2018 it assisted 40 million people in a typical month—about one out of every eight Americans. In 2018, \$60.6 billion was spent on benefits and \$65.0 billion was spent overall, including administrative costs. SNAP benefits typically are paid once per

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FIGURE 1
SNAP Participation and Expenditures and Unemployment Rate over Time



month on an electronic benefits transfer (EBT) card that can be used in a check-out line like a debit card to purchase most foods that are intended to be taken home and prepared.

In 2017, 11.8 percent of U.S. households were food insecure at some point in the year. SNAP is designed to prop up families’ purchasing power when their incomes are low and helps to buffer households’ economic shocks due to job loss or other income declines. SNAP also has a stated goal of strengthening the agricultural economy, and every \$5 increase in SNAP benefits has been shown to increase economic activity in the local economy by \$9 (Hanson 2010). In addition, SNAP plays an important role as an automatic stabilizer, responding powerfully and quickly in times of economic downturns. During a recession, as unemployment rises, families’ incomes fall, making more of them eligible for SNAP benefits (or making those already eligible for SNAP eligible for larger benefits).

Figure 1 presents SNAP participation (as a share of the population) and expenditures on benefits over time. Total expenditures (in inflation-adjusted 2018 dollars) were \$27.2 billion in fiscal year (FY) 1990, peaking at \$82.0 billion in 2013 in the aftermath of the Great Recession, then falling as the economy recovered. Over the same time period, SNAP participation has grown from 8.0 percent in 1990 to a high of 15.0 percent in 2013, falling back to 12.3 percent in 2018.

SNAP is the primary means-tested safety net program. Unlike most other major programs, it provides benefits based on need but does not have additional targeting to specific groups (such as the elderly, children, or workers). As a result, it serves a wide range of the population. It does this effectively because it works in conjunction with the market and normal economic decision-making. SNAP provides additional resources to purchase food through normal channels of trade,

and families use those additional resources to decide what to purchase subject to the prices that they face and to their own tastes and preferences.

SNAP households can be very broadly grouped into three categories: those with elderly or disabled members; those combining work and benefit receipt, many of whom have children in the households; and those with no or very low levels of income—a group that contains both a large share of households without elderly, disabled, or child members, as well as a large share of families with children. Potential policy reforms, such as policies to encourage work or improve dietary outcomes, may have differential impacts on each of these groups.

In the section that follows, I describe SNAP's current design, the composition of its caseload, and the extent to which it varies across states. I then explore potential policies to reform SNAP, grouped by the type of change that the policy-maker would like to encourage. Finally, I consider major reforms to SNAP, concluding that major reform would substantially harm this important universal safety net program.

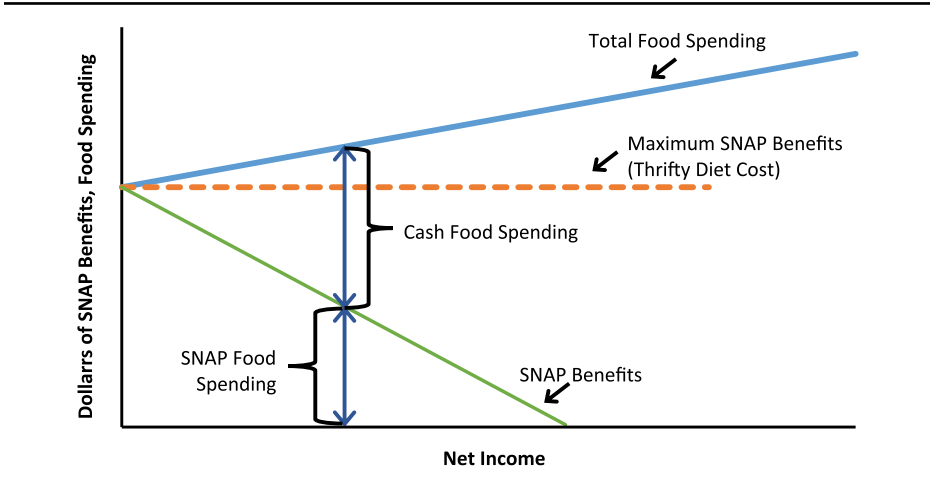
Current Characteristics of SNAP

Under federal rules, to be eligible for SNAP a household's income and assets must meet three tests. First, their gross monthly income (before any deductions are applied) must be no higher than 130 percent of the poverty line, unless there is an elderly or disabled member in the household. Second, their net income, equal to total income less a series of deductions—including a standard deduction available to all households, some earned income, childcare expenses, legally obligated child support, housing costs that exceed half of the family's net income, and medical expenses for elderly or disabled household members—must be no higher than 100 percent of the poverty line.¹ Third, assets (which generally include bank accounts, but not retirement savings or most automobiles) must fall below \$2,250, or \$3,500 for households with an elderly or disabled member. States have the option to relax the gross income and asset limits. During normal economic times, unemployed, nondisabled childless adults are limited to three months of SNAP benefits every three years. The time limit can be waived at the state or substate level in areas with high and sustained unemployment.

SNAP benefits are calculated based on a federal formula that considers the resources a family has available to purchase food. In particular, the SNAP benefit formula assumes that 30 percent of a family's net income is available for food purchases. SNAP benefits are awarded as the difference between the cost of the U.S. Department of Agriculture's (USDA's) Thrifty Food Plan (a diet plan intended to provide adequate nutrition at a minimal cost) for a family of a given size and 30 percent of the family's net income (if net income is positive).

Figure 2 shows a stylized version of the relationship between income, SNAP benefits, and food spending for a family of a fixed size. The horizontal axis shows a family's net income, and the vertical axis measures SNAP benefits and food spending in dollars. The maximum SNAP benefit, shown as the dashed horizontal

FIGURE 2
Relationship between Income, SNAP, and Food Spending



line, represents the minimum guaranteed food budget for participants. The downward-sloping line represents SNAP benefits received and is equal to the maximum benefit less 30 percent of the family’s net income. A household of three with no net income would receive \$505 in monthly SNAP benefits, while a household with \$1,000 in net monthly income would receive \$205 in benefits. The upward-sloping line represents a family’s total food spending. As income increases, typically so does spending on food (and all other normal goods). As depicted in the graph, the majority of families spend more on food than the maximum SNAP benefit level, and also more than their monthly SNAP benefit amount (Hoynes, McGranahan, and Schanzenbach 2016). As family income increases, the share of total food spending coming from SNAP benefits declines. As a result, policies to use SNAP to alter a household’s consumption bundle will have different leverage among those for whom SNAP represents a large part of the budget compared to those for whom it represents a more modest share.

SNAP serves a wide range of the population, including the elderly, disabled, children, employed adults, and unemployed adults. Table 1 presents characteristics of the SNAP caseload in 2017. Overall, the average monthly household benefit is \$241. Children are present in 42 percent of households; and 44 percent have an elderly or disabled member; while 21 percent have no disabled, elderly, or child members. Overall, 31 percent have earnings, a fraction that has increased steadily over time from 23 percent in 1996 (Hoynes and Schanzenbach 2016). At the other extreme, 19 percent have no cash income (either earned or unearned).

The table also breaks up the characteristics of the caseload by income relative to the poverty threshold. As expected, average SNAP benefits are higher among lower-income households. The share of households with earnings increases across income-to-poverty bins. Fully half of SNAP households with incomes at or below 50 percent of the poverty threshold have no cash income of any type.

TABLE 1
 Characteristics of Households on SNAP in 2017, Overall and by Income-to-Poverty Ratio

	By Income-to-Poverty Ratio				
	Overall	<50%	>50% to ≤100%	>100% to ≤130%	>130%
	(1)	(2)	(3)	(4)	(5)
Average monthly benefit	\$241	\$341	\$212	\$129	\$57
Percent with children	42%	49%	35%	45%	31%
Percent with elderly or disabled member	44%	13%	67%	54%	58%
Percent with no disabled, elderly, or child members	21%	42%	6%	9%	14%
Percent without cash income	19%	50%	0%	0%	0%
Percent with any earnings ^a	49%	21%	89%	96%	97%
Share of SNAP caseload	100%	41%	41%	13%	5%

SOURCE: Authors' calculations based on 2017 SNAP Quality Control files.

NOTE: Children defined as younger than age 18. Elderly defined as age 60 or older.

a. Percent with any earnings calculated only for those households without an elderly or disabled member.

Among this poorest group of SNAP recipients, which comprises 41 percent of the households on SNAP, nearly half have children in the household, and 42 percent are childless and contain only nondisabled and nonelderly adults.

Table 2 shows how the characteristics of SNAP households have evolved over the past two decades. In 1996, nearly three in five SNAP households contained children; by 2017, that share fell to just over two in five. The share of households with elderly members increased from 16 to 24 percent over the same timeframe. The share of households not containing any elderly, disabled, or child members increased from 15 to 21 percent—and recall from Table 1 that the majority of these households have incomes below 50 percent of the poverty line. The table shows an increase in the share of households at both income extremes. Overall, an increasing share of the caseload has earnings and has incomes above the poverty threshold; at the same time, an increasing share has no cash income and an increasing share receives the maximum benefit, indicating that the household has no positive net income according to the SNAP benefit formula.

Participation rates among those eligible for SNAP are relatively high, estimated at 85 percent in 2016 (USDA 2019a). They have been steadily increasing in recent years, up from a low of 53 percent in 2001. Participation rates are estimated to be 100 percent for those with income levels below the poverty threshold and for families with children. Rates are lower for those with a lower expected benefit level, such as eligible households with income above the poverty

TABLE 2
SNAP Household Characteristics over Time

	1996	2005	2017
	(1)	(2)	(3)
HH with children	59%	54%	42%
HH with elderly or disabled members	34%	40%	44%
HH with no children, elderly, disabled	15%	16%	21%
Share with income below poverty	91%	88%	81%
Share with earnings	23%	29%	31%
Receive maximum benefit	25%	31%	37%
Have no cash income	10%	14%	19%

SOURCE: Author's calculations based on 2017, 2005 and 1996 SNAP Quality Control files.

NOTE: Children defined as younger than age 18. Elderly defined as age 60 or older.

threshold. The elderly also participate at low rates, and recent work finds that providing information on eligibility, or information plus application assistance, can meaningfully increase these rates (Finkelstein and Notowidigdo 2018).

While there is no variation across states in the SNAP benefit formula, there is nonetheless some variation across states in eligibility for and access to the program. One dimension along which state policies vary is on whether they have implemented a Broad-Based Categorical Eligibility (BBCE) policy, which confers categorical eligibility to households that are then able to apply for and receive SNAP benefits according to the usual benefits formula. In effect, these policies loosen or waive the gross income and asset tests. Note that states cannot further limit eligibility beyond federal requirements using BBCE. As shown in Table 3, forty-three states have adopted a BBCE policy that applies to all households; in two cases, BBCE policies are limited to households with children or households with earnings or dependent care expenses. Under BBCE, twenty-five states have raised the gross income limit to 185 percent of the federal poverty guideline or higher. Thirty-seven states have used BBCE to waive the asset test. It is worth emphasizing that these households only receive SNAP benefits if they qualify for them under the benefits formula based on their net income; in the absence of BBCE, they would be categorically ineligible for benefits even if the benefits formula would have awarded them positive SNAP amounts.

States vary widely in their participation rates among those eligible for SNAP, in 2016 ranging from 56 percent in Wyoming to essentially full participation in Illinois, Michigan, New Mexico, Oregon, Rhode Island, Vermont, and Washington (USDA 2019a). Some of this variation is influenced by states' adoption of agency policies that either promote or limit take-up. For example, states vary in terms of whether they have at least one outreach policy, whether they offer an online application to everyone in the state, whether they have adopted an allowable simplified reporting policy, and so on. Figure 3 shows the relationship between a

TABLE 3
State Variation in Access Policies

Has BBCE Policy	Number of States	Gross Income Limit (% Poverty Guidelines) ^a	Number of States	Asset Limit	Number of States
For all households (HH)	41	130	10	\$5,000	5 ^c
		160	2		
Only HH with at least one child	1	165	5	\$25,000	1
		175	1		
Only HH with dependent care expenses or earned income	1	185	8	No limit	37 ^d
		200	17 ^b		

SOURCE: Economic Research Service (ERS), USDA, SNAP Policy Database, SNAP Policy Data Sets, available from <https://www.ers.usda.gov/data-products/snap-policy-data-sets/>.

NOTE: Policies in effect as of December 2016.

a. Gross income limits for households without an elderly or disabled member.

b. New York has a gross income limit of 200% for HH's with dependent care expenses, but 150% for those without earnings or dependent care expenses.

c. Michigan excludes one vehicle from the asset test but includes other vehicles with fair market value over \$15,000. Texas excludes one vehicle up to \$15,000 and includes excess vehicle value.

d. Thirteen states limit access among households with an elderly or disabled member and incomes over 200 percent of the FPT to fewer than \$3500 in assets.

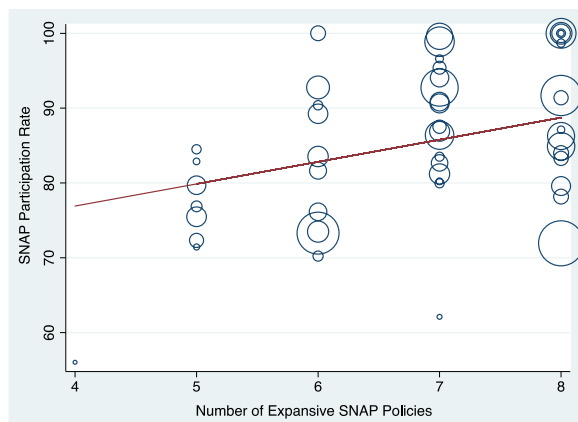
state's participation rate and its use of what I code as "expansive" SNAP policies.² On average, the state's SNAP participation rate among those eligible is 3 percentage points higher for every expansive policy adopted by the state.

It is widely documented that SNAP participants, like other Americans, have dietary intakes that fall far short of the goals set in dietary guidelines (Condon et al. 2015; Institute of Medicine and National Research Council 2013). SNAP participants score worse on measures of dietary quality and are more likely to be obese than nonparticipants. Bitler (2016) documents that much of these differences are driven by the fact that those who are financially worse off are the ones who participate in SNAP, and the differences in average outcomes do not represent causal impacts of the program.

Review of Research on SNAP

There is an active literature on the impact of SNAP on the short-term outcomes for beneficiaries, such as consumption, food insecurity, and labor supply. There is also a good deal of work on the longer-term impact of SNAP on children's health and economic outcomes and on the determinants of the SNAP caseload. This brief summary is a subset of the broader review of the literature over the past few decades, published in Hoynes and Schanzenbach (2016).

FIGURE 3
Relationship between Expansive SNAP Policies and Participation, 2016



Determinants of the SNAP caseload

As illustrated in Figure 1, participation in and expenditures on SNAP have varied significantly over time. At a macro level, this has generally aligned with fluctuations in the unemployment rate. While the macroeconomy is the largest contributor to changes in SNAP caseloads, SNAP and welfare policies have also played a role. For example, welfare reform and reductions in the length of SNAP certification periods led to reductions in SNAP caseloads in the 1990s (Currie and Grogger 2001; Ziliak, Gundersen, and Figlio 2003; Figlio, Gundersen, and Ziliak 2000). Changes in immigrant access to the safety net during the welfare reform period also led to reductions in SNAP participation (Borjas 2004; Haider et al. 2004; Kaestner and Kaushal 2005; Bitler and Hoynes 2013). Ganong and Liebman (2018) find that state policy changes explain a share of the increase in participation in the early 2000s.

There has been particular interest in the sharp increase in the caseload during the Great Recession. Ganong and Liebman (2018) find that unemployment explains most of the increase, estimating that a 1 percentage point increase in the state unemployment rate increases enrollment by 15 percent. Ziliak (2015) confirms a large role for unemployment and investigates a wider range of policies, finding a larger impact of policy, perhaps accounting for 30 percent of the caseload increase. Bitler and Hoynes (2016) find that the countercyclical effect of SNAP as measured by the effect of the unemployment rate on the SNAP caseload was larger during the Great Recession compared to the early 1980s recession (although the difference was not statistically significant).

Impacts of SNAP on food insecurity

An important goal of SNAP is to address food insecurity—that is, having inadequate or uncertain access to enough food for an active, healthy lifestyle. It has

been a challenge to identify the causal impact of SNAP on food insecurity, and the literature is characterized by a wide range of estimates.

Several studies employ instrumental variable approaches, using as instruments state SNAP policies such as certification length and treatment of immigrants (Yen et al. 2008; Mykerezzi and Mills 2010; Shaefer and Gutierrez 2013; Ratcliffe, McKernan, and Zhang 2011). The results vary across studies and typically find that SNAP participation leads to decreases in food insecurity, but many are not statistically significant. Borjas (2004) and Schmidt, Shore-Sheppard, and Watson (2016) investigate the impacts of public assistance, including SNAP and other programs, and find that program participation or higher benefit amounts lead to statistically significant reductions in food insecurity. Other, less credible studies using approaches such as household fixed effects (DePolt, Moffitt, and Ribar 2009; Wilde and Nord 2005) or propensity score matching (Gibson-Davis and Foster 2006) have found a positive association between SNAP and food insecurity.

Overall, the literature finds sharply mixed results, with some studies finding a positive association between SNAP and food insecurity, some finding a negative association, and some finding insignificant results. Gregory, Rabbitt, and Ribar (2015) recently reviewed this literature and conducted a replication exercise, implementing propensity score matching, longitudinal, and instrumental variables approaches in one sample. They find a range of estimates, illustrating well the difficulty in finding a way to isolate the causal impact of SNAP on outcomes, such as food security.

Impacts of SNAP on labor supply

By providing unearned income in the form of benefits, SNAP is predicted to have work disincentive effects. The (sparse) empirical literature using strong identification strategies tends to find that these work disincentives are modest.

East (2018b) examines SNAP's impact on labor supply, leveraging variation across states and over time in immigrants' eligibility for SNAP in the years after a 1996 rule that removed them from the program. She finds that SNAP causes single women immigrants to reduce their employment rates by 2 to 5 percentage points—a relatively modest impact among a group in which 65 to 70 percent are employed. While married male immigrants do not reduce their probability of employment in response to SNAP access, they do measurably reduce the number of hours that they work—on average, they work about 1.5 fewer hours per week when eligible for SNAP and are 4 to 4.5 percentage points less likely to work full time (on a base rate of 72 percent). There are no detectable impacts on the labor supply of unmarried male immigrants.

Hoynes and Schanzenbach (2012) use county variation in the rollout of the program to identify its impact on labor supply. They find no significant impacts on the overall sample, but among single-parent households with a female head—a group with high SNAP participation rates—they find that access to SNAP (then called the Food Stamp Program) in one's county of residence reduces employment by 183 hours annually. They find no significant impacts of the program on earnings or family income, though the estimates are imprecise.

Impacts of SNAP on consumption

Since SNAP increases the total resources that a family has to purchase food, economic theory predicts that it should increase food spending and, in most cases, nonfood spending as well. The empirical literature confirms that SNAP increases food spending and appears to increase the variety and quality of recipients' diets (Anderson and Butcher 2016). The literature is unsettled about the magnitudes of the increases in food and nonfood spending. Some studies find that recipients treat the additional resources in the same manner as they would an equivalent cash transfer (Hoynes and Schanzenbach 2009; Schanzenbach 2007), while others find that participants are especially more likely to purchase food with SNAP (Beatty and Tuttle 2014; Hastings and Shapiro 2018).

SNAP serves as social insurance, propping up consumption when families face declines in or low levels of income. Studies show that SNAP reduces volatility in consumption and income (Blundell and Pistaferri 2003; Gundersen and Ziliak 2003). Shaefer and Gutierrez (2013) also find that SNAP receipt reduces a family's likelihood of experiencing types of economic distress, such as falling behind on bills or forgoing medical care due to cost.

SNAP's impacts on long-term health and economic outcomes

The additional resources provided by SNAP likely would be expected to also improve a range of health and education outcomes. In general, studies find improvements in children's health and education in both the short and long run due to SNAP. The literature is more mixed on the short-run impact on adult obesity.

There is a small set of studies that examine the effect of SNAP on birth outcomes. Currie and Moretti (2008) use cross-county introduction of the program in California and find that SNAP is associated with a *reduction* in birth weight, a surprising result driven by increased births among teens and by birth weight declines in Los Angeles County. Almond, Hoynes, and Schanzenbach (2011) examine the effects of the program rollout across all counties in the United States, finding that SNAP improves infant outcomes, especially at the bottom of the birth weight distribution. East (2018a) utilizes changes in immigrants' eligibility across states and over time and finds that the mother's access to SNAP during pregnancy improves health at birth. In addition, she finds that increases in SNAP access during early life improve parent-reported health at ages 6 to 16 (with suggestive evidence of reductions in school days missed, doctor visits, and hospitalizations).

Hoynes, Schanzenbach, and Almond (2016) use the cross-county rollout to estimate the relationship between childhood access to the program and adult health and human capital outcomes. They find that early childhood access to SNAP leads to a large and statistically significant reduction in the incidence of "metabolic syndrome" (obesity, high blood pressure, heart disease, diabetes) as well as an increase in the share reporting to be in good health. They also find for women, but not men, that access to food stamps in early childhood leads to an increase in economic self-sufficiency. Bailey et al. (2019) use data from the Social

Security Administration and Census Bureau and the same identification strategy, finding positive impacts of early life access to SNAP on a number of outcomes including human capital, self-sufficiency, neighborhood quality, longevity, and a reduction in the likelihood of being incarcerated.

The predictions of SNAP's impact on body weight are ambiguous. If SNAP improves the quality of family diets, we might expect SNAP to reduce body mass index (BMI) or obesity outcomes. On the other hand, if SNAP causes participants to purchase more calorie-dense foods, then it may worsen these outcomes. The literature on this topic is unsettled. Schmeiser (2012) uses an instrumental variables approach, using state SNAP policies as instruments, and finds that SNAP reduces BMI among children for most gender-age groups. Kreider et al. (2012) address selection into SNAP and measurement error using a bounding approach, finding rather wide bounds that generally cannot rule out positive or negative effects of SNAP on BMI for children. Turning to adults, Fan (2010) uses a combination of fixed effects and propensity score matching and finds no significant effect of SNAP on obesity, being overweight, or BMI. Meyerhoefer and Pylypchuk (2008) combine individual fixed effects and an instrumental variables approach and find SNAP increases obesity among women but has no significant impact on men. Kaushal (2007) finds insignificant effects of SNAP on obesity among immigrants in the postwelfare reform era.

Potential Reforms within the Current Structure

Overall, extant evidence tells us that SNAP is an effective and efficient program that is well designed to work with the market, target benefits, and provide a phase-out that minimizes cliffs and other nonlinearities that may induce participants to respond to the program in suboptimal ways. Nonetheless, there are a number of potential reforms to SNAP that are often discussed in policy circles and are worth exploring further. Below, I outline a series of potential policy reforms organized around problems to be addressed and analyze them in terms of theory and research. Of course, policy in practice includes not only questions of evidence, but also of politics. I will leave discussions of the latter to those more skilled in that arena.

Reforms aimed at reducing food insecurity

While SNAP increases families' resources available for food purchases, nonetheless 31 percent of those reporting SNAP participation also experienced food insecurity in 2017. There are several types of policies that can address high levels of food insecurity, including providing more resources (through increased benefit levels or higher participation rates) or helping families to better smooth their consumption between paychecks or benefits payments.

One type of policy to attempt to reduce food insecurity is to increase benefit levels broadly among SNAP participants so that they have more money to spend

on food. One way to do this is to increase the maximum SNAP benefit. As Ziliak (2016) explains, the USDA's Thrifty Food Plan (TFP) has become increasingly out of line with actual consumption patterns and assumes an unreasonable amount of time spent preparing meals from scratch. To address these shortcomings, he concludes that a 20 percent increase in SNAP's maximum benefit is needed in the short term and that, in the longer run, an evidence-based SNAP benefit would likely justify a similar maximum benefit level.³ A \$30 monthly benefit increase is predicted to decrease food insecurity by approximately 1 percentage point and improve the quality of diets consumed by SNAP participants (Anderson and Butcher 2016). Broad changes to SNAP payments are expensive; for example, Ziliak's proposal would increase SNAP spending by 24 percent but would also have additional spillover benefits to the macroeconomy as well as to dietary quality. Others have proposed replacing the USDA's TFP as the basis of SNAP benefits with its low-cost food plan, which costs about 30 percent more for a family of four (Food Research and Action Center 2012).

An alternative approach would be to increase benefits in a more targeted manner, aimed at families experiencing temporary increases in food costs. For example, families of the 22 million children who receive free or reduced-price school lunches (and the 12.5 million who receive free or reduced-price school breakfasts) on an average day typically lose access to these programs when school is out of session in the summer months. To offset these losses, currently the USDA offers the Summer Food Service Program, which provides free meals to children in low-income areas when school is out. The program is funded by the USDA and run by nonprofit community organizations (schools, camps, faith-based groups, hospitals, etc.) that can ensure that children receive meals in a supervised environment. Access to summer meals varies widely across locations, and on average only 2.7 million children participated in the program each day in July 2018 (USDA 2019b). One option to increase coverage would be to temporarily increase SNAP benefits to families with children during summer months. The USDA ran a series of high-quality randomized experiments to test the impact and feasibility of providing additional benefits to families with children during summer months through a Summer EBT program and found that benefits significantly reduce levels of children's food insecurity and very low food security (VLFS) (Collins et al. 2016). When families were provided an additional \$60 in electronic benefits similar to SNAP payments, children's food insecurity declined by 20 percent, and VLFS declined by one-third. The following summer, they tested additional policies, including a \$30 per month benefit and a Women, Infants, and Children (WIC)-based benefit, which is prescriptive on the types of food purchased. Comparing families who received \$60 per month to those who received \$30 per month demonstrated that the higher benefit level reduced food insecurity by an additional 10 percent but had no marginal impact on the rate of VLFS (suggesting that \$30 per month was sufficient to ameliorate VLFS). The WIC model had better improvements in dietary quality for children, and similar impacts on food insecurity despite lower take-up rates. Which model (the SNAP-based or WIC-based) to expand would depend on the relative administrative costs at scale, as well as other policy preferences. In either case, increased

summer food support benefits to families with children reaches a higher share of children than is currently served by the summer meals program. Of course, such a program would not convey the same community benefits (i.e., benefits from camps or other enrichment activities paired with the community summer meals), so a hybrid model of community-based and SNAP-based (or WIC-based) resources could be designed in a straightforward manner.

Another way to structure a targeted benefit increase would be to temporarily increase benefits to families with teenagers. Children's dietary requirements and food intake both increase during their teen years (U.S. Department of Health and Human Services 2015; Anderson and Butcher 2016), and families with teenagers experience higher rates of food insecurity than those with only younger children (Anderson et al. 2016). Note that these impacts are similar whether the teen is a male or female. Increasing SNAP benefits to families with teenagers would offset the increased costs of feeding older children and would help to reduce food insecurity among this group.

Studies have documented the so-called monthly SNAP cycle in which at the end of the benefits month dietary quantity or quality declines, or food insecurity increases, as participants run out of resources and await their next benefit payment (Todd 2015; Whiteman, Chrisinger, and Hillier 2018).⁴ This has detrimental impacts on other outcomes as well, including children's test scores (Gassman-Pines and Bellows 2018) and emergency department visits among diabetics (Basu, Berkowitz, and Seligman 2017). Some advocate for breaking up SNAP payments from once to twice per month to encourage participants to smooth their consumption across the month. Recent work by Zaki and Todd (2019) find that SNAP participants obtain better value per dollar spent closer to the payment date, for example, by searching for bargains more effectively and purchasing larger item sizes that come with volume discounts. It is an empirical question whether more frequent payments, and how frequent they are, encourages more smoothing overall and whether there are particular groups made better or worse off. For example, Zaki (2016) finds sharp declines in consumption at the end of a two-week pay period. An experimental pilot program may be worth pursuing to study the trade-offs.

Reforms aimed at improving dietary quality

Another line of proposed reforms attempts to use the program to help improve the dietary quality of participants. In considering this issue, it is useful to think about the economic model of how SNAP works in conjunction with prices and individuals' tastes and preferences. In the absence of SNAP, consumers choose how much to spend on food and which mix of items they want to purchase subject to the prices that they face, as well as their own tastes and preferences.⁵ For participants to change what they purchase fundamentally requires changing one of these: the prices that they face, their total food budget, or their underlying tastes and preferences.

How does SNAP impact consumer choice, then? As illustrated in Figure 2, by providing additional resources for food, SNAP is predicted to increase the

purchase of food (and, to the extent that SNAP benefits are fungible, to increase the purchase of all normal goods). Theory predicts not only the quantity but also the quality of food purchased to increase, because when a household is consuming at subsistence level, it typically prioritizes calories over variety; but as income increases, consumption bundles shift toward more variety and less calorie-dense foods.

One way to increase families' total food budgets, which in turn improves the variety and quality of their diets, is to increase benefits levels. Anderson and Butcher (2016) simulate the expected impact of a \$30 increase in SNAP benefits and predict increases in consumption of milk, grains, and vegetables, and a decrease in fast food consumption. Applicable lessons also can be drawn from the summer EBT program described above, which found that additional benefits improved dietary quality for children, increasing consumption of fruits and vegetables, dairy, and whole grains, and reducing consumption of added sugars.⁶

A different approach would be to decrease the relative prices of healthy foods through subsidies or other mechanisms, which would be predicted to cause families to shift their consumption toward the foods with now lower prices. Targeted price subsidies for healthy foods have been shown to be effective in the USDA's randomized controlled trial of the Healthy Incentives Pilot in Massachusetts—a program that gave SNAP recipients an immediate 30-cent rebate for every dollar they spent on a narrowly defined group of fruits and vegetables (Olsho et al. 2016). In response to this price rebate, consumption of the targeted healthy foods increased by 25 percent. In recent years, many local areas and a few states have taken a similar approach by awarding bonus dollars for benefits used at farmers' markets, allowing recipients to stretch their food budget further when they buy fresh produce. This approach would raise many difficult policy decisions, including which foods should be eligible for subsidies and what level of subsidy is best; without question, more research is needed into these issues. Nonetheless, the concept of subsidizing healthy foods has many merits, is a market-based solution that respects consumers' decision-making, and is feasible through SNAP.

Another option that garners support from some policy analysts is to disallow the purchase of soft drinks or sweetened beverages with SNAP benefits. Proponents hypothesize that by banning the purchase of sweetened beverages with SNAP, participants would curtail or even eliminate their purchase and consumption of these goods. Recall that SNAP benefits are modest—approximately \$4.50 per person per day—and nearly all families supplement their SNAP purchases with groceries purchased from their cash income. At the same time, spending on sweetened beverages is also relatively low, averaging \$12 per month (McGranahan and Schanzenbach 2011). Economic theory thus predicts that banning purchase of sweetened beverages would not change consumption of these goods, because the policy does not alter prices or consumers' tastes and preferences, and typically does not alter the budget constraint. A typical family that spends a modest amount on sweetened beverages, and importantly supplements their SNAP spending with cash resources that exceed the amount spent on sweetened beverages, would be expected to continue to purchase the identical basket of goods regardless of the ban—but they would have to make certain to

pay for the soft drinks out of their own cash resources instead of their SNAP benefits. In other words, a sweetened beverage ban would be expected to increase the administrative costs of the program to both the USDA and retailers as they would be required to categorize sweetened beverages and monitor their purchase, and it could increase the stigma faced by recipients when they use the benefits, but it would not be expected to induce behavioral changes or dietary improvements.

In general, it is difficult to substantially improve dietary quality because dietary intake is based on tastes and preferences that are hard to alter. Policies that change prices or budget constraints show some promise to improve dietary quality through market mechanisms. Other more drastic reforms, such as moving to a more restrictive basket of goods, undermine many of the strengths of SNAP and are discussed further below.

Reforms aimed at encouraging work

Economic theory demonstrates that providing unearned income such as SNAP benefits is expected to reduce an individual's work effort, though in practice the effects of SNAP on work effort tend to be modest (East 2018b; Hoynes and Schanzenbach 2012). The SNAP benefit formula already attempts to reduce the disincentive to work by providing a 20 percent earned income deduction, and one way to further promote work is to increase this deduction (Schanzenbach 2013). Another way that SNAP reduces the disincentive to work is through waiving the gross income test under BBCE policies. Waiving the gross income test allows households to participate in SNAP that have higher levels of income but also high levels of allowable deductions such as childcare expenses and work deductions. Schanzenbach (2017) finds that SNAP families with gross incomes above standard gross income test level make up a small share of recipients—approximately 4 percent of households receiving 1.3 percent of total SNAP payments—but that 97 percent of them have earnings. Preserving such families' access to SNAP through waiving the gross income test reduces the benefit tax rate that they would otherwise face, promotes work, and provides needed support to these families.

Some analysts advocate for changing the current work requirement rules to further encourage work among SNAP participants.⁷ The changes most frequently discussed include (1) expanding the groups that are subject to work requirements; (2) alternatively, eliminating work requirements for those currently exposed to them; and (3) changing the eligibility criteria under which states may request temporary waivers from the work requirements.

Under current law, able-bodied adults without dependents (known as ABAWDs, who are those between ages 18 and 49 who have no dependents and are not receiving disability benefits) may only receive SNAP for three months in a three-year period if they do not meet work requirements after this time limit. To be eligible after the time limit, an ABAWD must work at least 80 hours per month or participate in a state-approved workfare program. States may request temporary waivers from these time limits when unemployment is high or when

there are insufficient jobs available in an area. Congress temporarily expanded the circumstances under which an area could qualify for a waiver during the Great Recession and suspended the time limit nationwide for part of 2009 and 2010, though states had the option to retain the time limit if they offered work opportunities to those subject to the rule.

Economists generally think about the effectiveness of work requirements and incentives—that is, carrots or sticks approaches to encouraging work—in the context of the local labor market. If individuals can increase their employment through exerting more effort, such as by searching for a job more diligently, or being willing to accept a lower-paying job, or working more hours, then incentives and/or requirements can potentially be quite effective. For example, the mid-1990s increase in the Earned Income Tax Credit (EITC) substantially increased earnings among the targeted group of unmarried mothers. On the other hand, the EITC likely had less of an incentive value during the Great Recession because unemployment was more of a function of factors outside of the individual's control such as macroeconomic conditions (Bitler and Hoynes 2010; Bitler, Hoynes, and Kuka 2017). The effectiveness of work requirements in SNAP will similarly vary by factors that influence whether participants can obtain a job, including the local labor market conditions and the individual's work readiness.

Bauer, Schanzenbach, and Shambaugh (2018) investigate labor market patterns that inform the likely impact of current SNAP work requirements and potential expansions of work requirements that were under debate in the 2018 Farm Bill. They demonstrate that variability in employment and hours among SNAP participants is high; and as a result, a large share of those who would be sanctioned under SNAP work requirements themselves have substantial work histories and may be falling below the required number of hours due to fluctuations on the low-wage labor market that are out of their direct control (see also Butcher and Schanzenbach 2018). Some of the sanctions against workers could be ameliorated by expanding the time period covered (e.g., instead of a monthly requirement, set a requirement for quarterly or annual hours) or otherwise smoothing across time periods, but such reforms would add complexity to an already complicated policy area.⁸ Reforms to SNAP's employment and training programs are another approach to promoting work among SNAP participants. The USDA has commissioned several high-quality randomized-controlled trials of reforms to these programs, and results are expected in fall 2019.

Reforms aimed at targeting benefits or controlling costs

Economic growth is often described as the “right way” to reduce program costs. As shown in Figure 1, SNAP costs in large part vary with macroeconomic conditions, going down during economic expansions when more individuals are working and in turn fewer families require the assistance of the safety net. There are several additional policy options that could be adopted to reduce SNAP spending, including reducing eligibility or participation or further improving program integrity.

As shown in the previous section and the discussion of Table 3 above, many states have used BBCE to increase eligibility among households with gross

incomes above 130 percent of the poverty threshold. Nationally in 2017, as shown in Table 1, SNAP families with gross incomes above 130 percent of the poverty threshold make up approximately 5 percent of households and receive 1.2 percent of total SNAP payments, and they are disproportionately families that have earnings; have child, elderly, or disabled members; or both. The CBO estimates that limiting eligibility to those with gross incomes at or below 200 percent of the poverty line (for households with an elderly or disabled member) or 130 percent of the poverty line (for households without an elderly or disabled member) would remove eligibility for 400,000 households and reduce spending by \$5 billion over 10 years (Congressional Budget Office 2018).⁹ Preserving such families' access to SNAP through waiving the gross income test reduces the benefit tax rate that they would otherwise face, promotes work, and provides needed support to these families.

Other states have used BBCE to extend SNAP access to those with assets above the federal limit of \$2,250 in countable assets (excluding the value of vehicles).¹⁰ The asset test reduces the population eligible for SNAP by 14 percent (Ratcliffe et al. 2016). Low-income households with assets above the test limit tend to have assets substantially above the limits, with median liquid asset levels of \$36,000, and are more likely to include elderly members. Eliminating waivers to the asset test in SNAP would reduce participation, although the increased administrative cost burden associated with collecting asset data would offset potential savings.

As described above, participation rates are currently at 85 percent of the eligible population. Policies to reduce participation rates include adding administrative hurdles to application or renewal, or introducing policies that increase stigma on participants. The literature suggests that such policies will discourage the neediest from participating (Mills et al. 2014; Ribar and Edelhoch 2008).

Another way to reduce costs without limiting eligibility or take-up is to reduce fraud and error, although SNAP already performs well on this dimension. One approach is to improve monitoring for dual enrollment in SNAP across multiple states, which may, for example, occur if parents living in different states and sharing custody each claim the same children on their SNAP application, or if a participating family moves across state lines and enrolls in SNAP in the new state but fails to discontinue enrollment from the prior state. The National Accuracy Clearinghouse (NAC) currently monitors for dual SNAP enrollment across multiple states, and a recent demonstration project in southeastern states showed that the NAC could reduce the approximately two thousand cases per month of dual enrollment identified. If implemented nationwide, the NAC is predicted to save \$114 million per year in erroneous payments.

Reforms aimed at improving SNAP's role in stimulating the economy

A stated goal of SNAP is to strengthen the agricultural economy. Since SNAP benefits are quickly spent by recipients, they provide a rapid fiscal stimulus to the economy. During normal economic times, moderately higher benefit levels that are still quickly spent would do more to stimulate the economy, as well as address

food insecurity and related issues as described above. SNAP plays a particularly important stimulus role during economic downturns, with caseloads and spending expanding rapidly along with need. According to the Congressional Budget Office, SNAP is one of three programs that constitute the majority of the automatic stabilization aspect of federal spending, along with Unemployment Insurance and Medicaid (Russek and Kowalewski 2015). SNAP reaches a different population than is served by Unemployment Insurance, including those who do not meet minimum thresholds of hours or wages prior to job loss (Anderson, Butcher, and Schanzenbach 2015). Reforms that harm the program's ability to expand rapidly in times of economic downturns, such as block grants or broad work requirements, would blunt the program's effectiveness as a countercyclical stimulus.

SNAP's stabilization impact could be even greater if the benefits schedule is increased during recessions. This was demonstrated in the aftermath of the Great Recession, when for five years Congress temporarily increased maximum benefits and also awarded states additional administrative funds to serve an increased caseload (Keith-Jennings and Rosenbaum 2015). For example, maximum benefits to a family of four were increased by 13.6 percent, from \$588 to \$668. Blinder and Zandi (2015) estimate that every dollar of increased SNAP benefits spurred \$1.74 in economic activity in the first quarter of 2009, and \$1.22 in the first quarter of 2015—the highest multiplier of any of the policies adopted during the Great Recession.

Potential Major Reforms

As described in the previous sections, SNAP is a well-designed program that props up family food spending and stabilizes the economy when negative shocks occur. The program works with the market, providing resources that allow participants to obtain food from our highly efficient retail food system through normal channels. Proposals for major reforms to SNAP almost all make the program worse—in terms of being less effective or efficient—and not better. Some commonly proposed major reforms are considered below.

Block granting the program

There is some discussion of block granting the program, which would provide a set amount of funding to states and give them more flexibility on how to administer the program. Some lessons can be drawn from the 1996 block grant of Temporary Assistance to Needy Families (TANF), the cash welfare program. After the block grant, there were dramatic decreases in participation (which has been explained by a combination of macroeconomic strength and policy reforms). States shifted their TANF spending away from core supports (basic assistance, work activities and supports, and childcare) and toward a wider range of programs, some of which serve families that are not low income. The program's

ability to respond to changes in need—due to economic downturns or to shifts in low-income populations across states—was blunted (Bitler and Hoynes 2016).

Block granting SNAP would harm its ability to serve its core purposes. As discussed above, a crucial role of SNAP is to serve as an automatic fiscal stabilizer in times of economic downturn. Its current structure allows the program to expand quickly, providing benefits to families that become eligible for the program due to job loss or other economic shocks. If the program were block granted and the funds were not promptly increased in proportion to economic downturns, some families made eligible during downturns may not be able to receive benefits. This would fundamentally undermine its stabilizing impact on the macroeconomy. Even though Congress could allocate additional resources in times of economic need, this would necessarily come with delays, reducing the ability to quickly stimulate the economy. More complicated block grant structures are possible, such as tying the block grant to population shifts and to inflation, or automatically increasing the grant during economic downturns. Such a structure would mitigate some of the drawbacks of a TANF-style block grant.

The Trump administration has proposed that SNAP be converted to a matching grant, where states must pay for a portion of benefits. This would also be expected to dampen its countercyclicality, depending on how the match is set, since states that are worse hit by the recession would struggle to meet their share of benefits at the same time that need is highest in those states. Many states have balanced budget requirements, which would exacerbate their inability to provide adequate matching funds during economic downturns.

Switching to a WIC- or commodities-based model

In their desire to improve the nutritional intake of participants, some advocate for replacing the current SNAP with a program that is more closely aligned with WIC, restricting benefits use for a specific bundle of goods. There are many ways to design this. For example, one could retain the basic SNAP system, in which participants receive benefits in the form of a dollar-value electronic voucher payment that can be redeemed at regular retail outlets at the regular prices charged. In this case, the list of permissible goods to purchase would be (dramatically) narrowed. Another option would be to adopt a model like the current WIC program, in which participants are given vouchers for quantities of particular goods (e.g., four gallons of milk per month). In this case, participants still use regular grocery stores, but no longer face prices. A third option would be for the government to directly provide goods to consumers.¹¹ Each of these approaches would require difficult policy choices about which items should be included that would be sufficient to serve the wide range of people who participate in SNAP. It is worth noting that WIC participation rates drop dramatically after age one, when the infant formula benefit discontinues, and range from 33 to 15 percent (Schanzenbach and Thorn 2019).

A key reason for SNAP's success is that it relies on the private sector to provide efficient access to food, through grocery stores and other retail outlets. Each of these proposals would dramatically reduce the efficiency of the program by

raising administrative costs. To the extent that they move the procurement of goods away from a market-based system where consumers face prices, there will be new administrative inefficiencies and moral hazards as well. Such proposals would also diminish or eliminate the program's ability to act as a local economic stimulus. Students of economics will recognize that these reforms would also be expected to decrease participants' utility.

Replacing SNAP with a cash transfer

Others question the need for restricting SNAP benefits to purchasing food, arguing that these resources should be available to purchase other necessary goods such as housing and medical care. Some argue that it would be preferable to pay out benefits in cash, which can be spent on any good that the consumer wants to purchase. As described above, economists generally argue that if in-kind benefits like SNAP are paid at relatively modest levels, and most participants would like to spend at least as much on food as their SNAP benefits are worth, then the potential consumption distortion caused by providing benefits in-kind is modest.¹² Since the vast majority of participants spend more on food than their SNAP benefits are worth, replacing the program with an equivalent cash transfer would have only a small impact, with a small share of households getting more fungibility. As suggested by Table 1, many of these households are extremely disadvantaged, with little or no cash income. Barriers to work and mental health problems are also high among this population (Anderson et al. 2016). While it is clear that the very poor are not adequately served by the current structure of the safety net, in my opinion this likely would not be improved by replacing SNAP with cash. Having resources earmarked for food among this population likely has benefits that outweigh the efficiency loss in constraining their choices.

Conclusion

As currently structured, SNAP is an effective and efficient program. Its strength lies in its structure, which is based on a classic means-tested income transfer program as outlined by Milton Friedman (1962) in his negative income tax proposal and is now part of the economics canon. The program makes use of the highly efficient private market for distributing and obtaining food. It provides additional resources for food, while respecting consumer sovereignty in making decisions subject to their incomes, prices, and their own tastes and preferences. Its structure and efficiency allow the program to quickly respond to increased need during economic downturns, stimulating and stabilizing the economy. The inefficiencies caused by its being an in-kind transfer that can only be used to purchase food are modest and, in fact, likely serve to protect the most vulnerable.

This basic structure has enabled it to serve a wide range of participants, from the elderly to infants, workers and those not employed, across the entire nation. It has been able to adapt to broad macroeconomic trends, including our aging

demography, increasing labor force participation among women, and stagnating wages for workers with lower education levels. To be sure, there are ways to modestly improve the program as described above. For example, policies to reduce food insecurity among families with children, especially during the summer months, are worth pursuing. There are also market-based approaches to improving dietary quality, for example by subsidizing healthy foods, that show promise. Straightforward changes to the benefits formula during economic downturns would also strengthen the program's ability to stabilize the economy during recessions. However, any potential reforms need to be carefully weighed so that they do not inadvertently reduce the many strengths of the program. The major reforms considered here generally move the program away from a market-based program that can quickly respond to changes in need and are not advisable. SNAP has been effective for the past half century, and with its current structure it should also be well-suited to meet the challenges of the next half century.

Notes

1. All SNAP households are eligible for the standard deduction, 69 percent claim the shelter deduction, and 31 percent claim the earnings deduction. Childcare, child support, and medical expense deductions are claimed by 4, 2, and 6 percent, respectively (CBPP, *A Quick Guide to SNAP Eligibility and Benefits*; see <https://www.cbpp.org/research/food-assistance/a-quick-guide-to-snap-eligibility-and-benefits>).

2. The horizontal axis represents the number of the following policies adopted by the state: the use of BBCE, all SNAP benefits in state paid via EBT, online application available throughout the state, at least one outreach policy, simplified reporting, no households with earnings have a recertification period of three months or fewer, no asset test, and no fingerprint requirement. The modal state has adopted seven of these policies, one state (WY) has adopted four policies, and sixteen states (CA, CO, CT, DE, FL, IL, MN, MT, NC, NV, OH, OR, RI, SC, VT, WA) have adopted all eight.

3. These arguments apply to modest increases in maximum benefits. If benefits were to be raised dramatically (e.g., if they were to be doubled), many fewer families would be inframarginal, as described in Figure 2, and the impacts on spending and consumption would be hard to predict. Another way to increase benefits broadly without altering the maximum benefit would be to increase allowable deductions in the SNAP benefit formula, though this approach would not impact those currently receiving maximum SNAP benefits.

4. Note that benefits are not paid to all recipients on the same day, and instead are staggered across different days of the months in most states.

5. Nowhere is this more apparent than in the grocery store. Most consumers will acknowledge that there are items for sale at the grocery store that they have never consumed and will never opt to consume. But the reason they are stocked at the grocery store is, of course, that someone else demands those items. Our very efficient food supply system optimizes what products to sell based on consumer demand and their available shelf space.

6. The WIC-based summer EBT model had a larger impact on nutrition outcomes than the SNAP-based model.

7. In general, all adult SNAP participants must meet the following work requirements: registering for work, not voluntarily quitting a job or reducing hours, taking a job if offered, and participating in employment and training programs if assigned by the state.

8. A related issue is that under current policy, SNAP work requirements for ABAWDs may be temporarily waived during bad economic times either statewide or in certain areas. Some argue that these waivers are too generous and should be limited to times with higher unemployment rates. See Hoynes and Schanzenbach (2019) for further discussion of this issue.

9. Because SNAP recipients are eligible for free school meals, an estimated 265,000 children would also lose access to free meals.

10. The limit is higher for households with an elderly or disabled member.

11. The modern Food Stamp Program replaced such a system, called the Commodity Distribution Program (CDP). The switch from CDP to food stamps improved a number of outcomes, including birth outcomes and later-life outcomes for children who were given access to food stamps (Almond, Hoynes, and Schanzenbach 2011; Hoynes, Schanzenbach, and Almond 2016).

12. Behavioral economists argue that the distortion caused by in-kind transfers is larger than the neo-classical model predicts; see Hastings and Shapiro (2018).

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The Social Safety Net in the Wake of COVID-19

ABSTRACT The COVID-19 crisis has led to spiking unemployment rates with disproportionate impacts on low-income families. School and child-care center closures have also meant lost free and reduced-price school meals. Food prices have increased sharply, leading to reduced purchasing power for families with limited income. The Families First Coronavirus Response Act and the Coronavirus Aid, Relief, and Economic Security Act constituted a robust response, including expansions to unemployment insurance (expansions in eligibility and a \$600 per week supplement), a onetime payment of \$1,200 per adult and \$500 per dependent, an increase in SNAP payments, and the launch of the Pandemic EBT program to replace lost school meals. Despite these efforts, real-time data show significant distress—notably, food insecurity rates have increased almost three times over the pre-COVID-19 rates and food pantry use has also spiked. In this paper, we explore why there is so much unmet need despite a robust policy response. We provide evidence

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for three explanations: (1) timing—relief came with a substantial delay, due to overwhelmed unemployment insurance (UI) systems and the need to implement new programs; (2) magnitude—payments outside UI are modest; and (3) coverage gaps—access is lower for some groups, and other groups are statutorily excluded.

The COVID-19 crisis has hit low-income families especially hard. As unemployment rates have spiked overall, they have risen even higher for those with lower levels of education, and for Black and Hispanic individuals. Other aspects of the crisis have a disproportionate impact on low-income families as well; for example, low-income families are more likely to be headed by a single mother, and a higher share of women have lost jobs than during prior recessions. Closures of schools and child-care centers have meant that large numbers of low-income children have lost access to free or reduced-price meals. Food prices have increased sharply leading to a reduction in the purchasing power of families' limited income.

Two pieces of legislation, the Families First Coronavirus Response Act and the Coronavirus Aid, Relief, and Economic Security (CARES) Act, include important provisions to respond to these historic job losses. Four elements are particularly relevant in our context. First, there were substantial expansions to unemployment insurance (UI): a \$600 per week universal supplement, a thirteen-week extension of eligibility, and expanded eligibility for self-employed and gig economy workers and those without sufficient earnings for normal UI. Second, a onetime payment of \$1,200 per adult (\$2,400 for a married couple) plus \$500 per dependent child under seventeen was implemented (with phaseouts for high-income families). Third, all Supplemental Nutrition Assistance Program (SNAP) payments were raised to the maximum benefit level, averaging a \$165 increase in monthly benefits for households receiving increases. Fourth, a new program, Pandemic EBT (P-EBT), was launched to provide direct payments to the millions of families whose children lost access to free and reduced-price meals while their schools were closed.

Despite these efforts, many individuals and families are suffering. Food insecurity rates have increased sharply over the pre-COVID-19 rates with almost a quarter of families reporting their food “just didn’t last” and they did not have money to buy more. Seven percent of adults reported receiving help from a food pantry in the prior week, with Feeding America (the national organization of food pantries) reporting a 60 percent increase in need and many news outlets documenting long lines of individuals

waiting to obtain food assistance.¹ Adverse mental health conditions have worsened, with rates of depression and anxiety much higher than pre-COVID-19 levels. While it will be many months before we have a clear picture of how family incomes are changing, it is evident from the available real-time data that there currently remains tremendous unmet need.

Why do we see so much need and distress despite a policy response of unprecedented magnitude? In this paper, we examine this question and provide evidence for three explanations. First, there is the timing of the response; many relief payments, especially to low-income families, came with a substantial delay, and the income shock could not be weathered without hardship (or emergency charity aid) for those who lacked savings or access to credit. Payment delays have been driven by overwhelmed UI systems, the need to engineer new programs, and application requirements for the most disadvantaged families built into the delivery system. To the extent that these are factors, we should see improvements as administrative capacity and payments increase across time, though of course hardship may increase once again when emergency payments are rolled back. Second, outside of the UI system, the magnitude of payments made to low-income families was relatively modest—averaging \$30 to \$40 per week—and may not have been sufficient to offset increased need. Third, there are coverage gaps in the response, and some who were hit by the economic shock had no recourse from existing safety net programs. Importantly, despite expansions intended to make UI coverage more universal than it has traditionally been, the limited real-time data suggest that there are still many unemployed workers who are not receiving UI.

Furthermore, and more structurally, over the past several decades the United States has steered its social safety net, which has always been less far-reaching and less funded compared to other rich countries, to focus on work. Through the shift from cash assistance to earnings supplements, and through adding work requirements to programs designed to meet basic food and healthcare needs, the United States has built a social safety net that delivers less insurance and has placed more emphasis on incentivizing work and topping up low earnings. The current system may meet need

1. Feeding America, <https://www.feedingamerica.org/take-action/coronavirus>; “Feeding America Network Stays Resilient during COVID-19 Crisis,” press release, May 12, 2020, <https://www.feedingamerica.org/about-us/press-room/feeding-america-network-stays-resilient-during-covid-19-crisis>.

during times of low unemployment, but it is ill-suited to protect against job loss and high unemployment. Cash welfare payments for the nondisabled are extremely limited and are either not countercyclical or only very slightly so (Bitler and Hoynes 2016; Bitler, Hoynes, and Iselin 2020). While SNAP payments typically can quickly increase in response to rising need, the benefits are modest, and recent policy changes—tying SNAP receipt to work for some groups and making it more difficult for immigrants to participate—will dampen SNAP’s countercyclical impact if not waived. As a result, there are many who are likely falling through holes in the safety net.

This analysis leads us to two sets of recommendations. In terms of policies that need to be addressed now, the emergency policies expanding UI and SNAP and replacing missed school meals should be extended and adapted to the ongoing crisis. In addition, following the successful policies of the 2009 stimulus, it would be advisable to increase maximum SNAP benefits by 15 percent. Because UI and SNAP only serve a limited subset of those in need, another round of stimulus payments may also be in order, potentially targeted more narrowly to low-income families.

Second, there must be more structural policy changes to our work-based social safety net that enable it to function more effectively in economic downturns. The UI system should be updated to reach a larger share of unemployed workers, including the self-employed and those with inconsistent work histories. Because the level and coverage of programs should be expanded during recessions, we recommend building more effective countercyclicality into these key safety net programs, with policy changes automatically triggered by increases in the unemployment rate and shutting off when economic recovery takes place. Federal and state data systems should be harmonized to facilitate automation of relief payments to all eligible recipients.

I. The COVID-19 Shock to Economic Well-Being

To begin, we deploy the available data to monitor the current, real-time measures of household well-being, with particular attention to the disadvantaged population.²

To understand who is at risk under COVID-19 for needing new or increased access to the social safety net, we start by describing the extent

2. Han, Meyer, and Sullivan (2020) and Parolin, Curran, and Wimer (2020) use available data to estimate real-time measures of poverty.

of job loss. We use the monthly Current Population Survey (CPS) to document increases in unemployment across education groups (Blau, Koebe, and Meyerhofer 2020; Montenovo and others 2020) pooling the data for twenty-four months ending in June 2020, limiting the sample to age 18–64, and estimating a model with calendar month dummies (to control for seasonality) and month dummies for the four months beginning in March 2020. In online appendix table 1 panels B–E, we present the estimated coefficients on the COVID-19 month dummies (March, partially treated; April; May and June); each provides estimates for the effect of the crisis on labor market outcomes, and net of typical seasonal patterns.³ As has been widely discussed, the current crisis has made it difficult to measure unemployment, and the Bureau of Labor Statistics has documented a spike in the share recorded as having jobs but not being at work and also in those not in the labor force but wanting work, many of whom should likely be classified as unemployed instead.⁴ In light of this, in online appendix table 1 we present five outcome measures for the estimated COVID-19 shock, each showing changes relative to February 2020 (netting out the previous year): unemployed (column 1); unemployed or having a job and not at work (column 2); unemployed, having a job and not at work, or not in the labor force (column 3); has a job and not at work (column 4); and not in the labor force (column 5).⁵ Our preferred measure is the most expansive and is shown in column 3. Overall, by April 2020 there was a 14.1 percentage point increase in the share unemployed or with a job but not at work or not in the labor force (or an 8 percentage point increase in unemployed) and an 11.2 percentage point increase for those unemployed or with a job but not at work. The labor market shock has been significantly greater for those with lower levels of education. The increase in April unemployment (for our preferred measure) was 17.8 percentage points for those with high school or less compared to 8.8 percentage points for those with a college degree or more. Because children’s exposure to

3. The baseline comparison we suggest is to February 2020, but of course, the regression results would be the same as long as the omitted month is not during March–June.

4. <https://www.bls.gov/cps/employment-situation-covid19-faq-may-2020.pdf>. The BLS has documented that some share of those reporting they have a job but are not at work likely are unemployed given ideal definitions of these measures and also notes similar concerns for those not in the labor force due to COVID-19. Some who would like to have work but are not measured as in the labor force reached record levels during the crisis, likely due to closures, stay at home orders, and concerns about engaging in the labor market (also noted in the BLS FAQ).

5. For completeness the table also shows estimates for has a job and not at work (column 4), and not in the labor force (column 5).

economic shocks has been shown to have long-lasting health and economic consequences (Hoynes and Schanzenbach 2018), we also analyze changes in children's exposure to the crisis as measured by changes in labor market status for adults age 18–64 in their household.⁶ As shown in online appendix table 2, children in households with a household head with high school degree or less experienced a 10.1 percentage point increase in the likelihood they lived with an adult who was unemployed, with a job but not at work, or not in the labor force in April; compared to 6.9 percentage points for children with a household head with a college degree. These striking inequalities in the extent of the economic shock across education groups continue through May and June 2020 and are evident for all of the labor market measures. This result—that recessions increase unemployment more for lower education groups than higher education groups—is a recurring feature of US business cycles (Hoynes, Miller, and Schaller 2012; Aaronson and others 2019).

Also important to the underlying context is that these economic indicators increased more and did so more quickly during the COVID-19 crisis, compared to the Great Recession (see online appendix figures 1a and 1b).⁷ The (official) unemployment rate spiked to 14.7 percent in April 2020 and has remained above 10 percent through July during COVID-19, while it reached 10 percent for only a single month in the Great Recession. Prices for food at home have increased quickly during COVID-19 driven in large part by the largest single-month increase in nearly forty-five years in April.⁸

Next, we move beyond labor market outcomes to examine real-time measures of family economic well-being. We start by analyzing food insecurity, a summary measure indicating that a household does not have reliable access to the food they need due to lack of resources. Usually, a household's food insecurity status is categorized based on their answers to an eighteen-item questionnaire, ranging from how often the household worried that their food would run out before there was money to buy more, to whether a child in the household has gone for a day without eating

6. Note that unlike measures about own labor force participation and employment status, these measures are not mutually exclusive, as a child living with more than one adult can live with adults with various employment outcomes.

7. The online appendix figures differ in when the series documenting unemployment rates and price changes in the Great Recession begins, with 1a starting at the beginning of the Great Recession and 1b showing the run-up to the unemployment peak.

8. These price increases do not include increased time and hassle costs of obtaining food for many families during COVID-19.

due to lack of money for food. Food insecurity rates can be thought of as a measure of economic (lack of) well-being, and the time series pattern is highly correlated with unemployment rates (Schanzenbach and Pitts 2020).

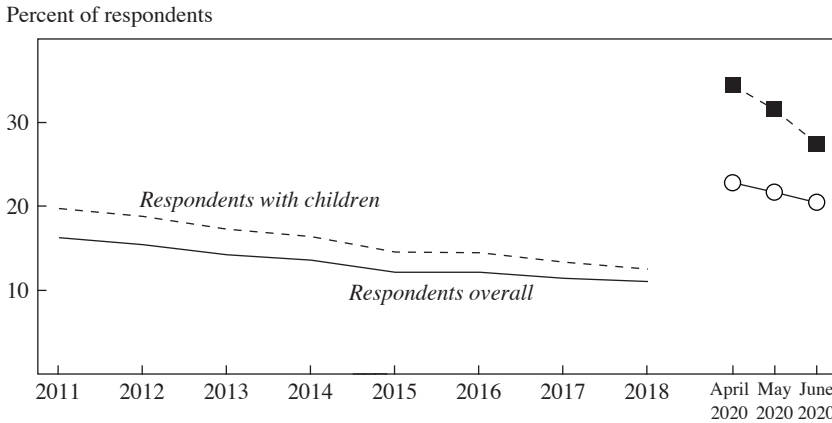
During the COVID-19 pandemic, surveys collecting real-time data have not asked the entire battery of food security questions, but instead have asked only a few questions drawn from the survey. We show estimates from three waves of the COVID Impact Survey, which asked respondents whether the following statement was often true, sometimes true, or never true for their household over the past 30 days: “The food that we bought just didn’t last, and we didn’t have money to get more.” We code a respondent as being food insecure if they report that the statement was often or sometimes true. To compare food insecurity rates during COVID-19 to the past, we calculate the share answering yes to the same question in the National Health Interview Survey (NHIS). The NHIS asks the full food security questionnaire, but we limit the analysis to responses to the single item asking whether the respondent agrees that their food “just didn’t last.”⁹

Figure 1 displays trends in food insecurity rates for households overall and for those with children.¹⁰ For respondents overall, rates of food insecurity increased sharply from 11 percent in 2018 (the latest available NHIS estimate) to 23 percent in April 2020. Low-income families with children have been hit particularly hard during this period, between the loss of free and subsidized school meals due to school closures and particularly elevated unemployment rates among women. This is reflected in even greater elevation in food insecurity among respondents with children, from 13 percent in 2018 to 34 percent in April 2020.¹¹ The large increase in (seasonally adjusted official) unemployment, from 3.5 percent in February to 14.7 percent in April—an out of sample prediction with strong linearity

9. Like the COVID Impact Survey, the NHIS also asks about experiences in the past 30 days. To make the data series comparable, we weight the NHIS at the respondent level; the COVID Impact Survey only provides respondent-level weights. In general, in the NHIS the share answering that their food “just didn’t last” is consistently 1.24 (overall) to 1.27 (with children) times the food insecurity rate based on the full questionnaire; see online appendix table 3.

10. Online appendix figure 2 shows increases in food hardship measures using the Census Bureau’s Household Pulse Survey compared with the Current Population Survey’s Food Security Supplement. The Household Pulse Survey asks a different question from the food security questionnaire and inquires about the past seven days. Results are qualitatively similar.

11. Karpman, Zuckerman, and Gonzalez (2018) find that food insecurity rates are higher in self-administered online surveys than they are in telephone or in-person interviews, which they theorize is in part due to reduced social desirability bias, suggesting that the self-administered versions might be more accurate descriptions of respondents’ well-being.

Figure 1. Food Insecurity Rates, 2011–2018 and during COVID-19

Source: Authors' tabulations from the National Health Interview Survey (NHIS) and the COVID Impact Survey.

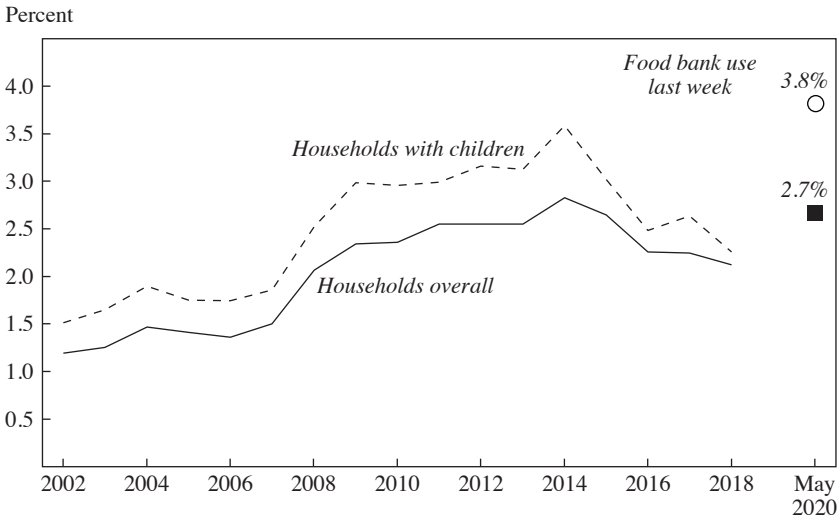
Note: The solid (dashed) line is the annual average share of respondents (respondents with children) reporting that over a thirty-day period it was sometimes or often the case that their “food just didn’t last” and that they didn’t have money to get more, calculated from the NHIS 2011–2018. The three connected round (square) dots are share of respondents (respondents with children) reporting monthly, calculated from the COVID Impact Survey collected April 20–26, May 4–10, and May 30–June 8. Statistics are respondent-weighted.

assumptions to be sure—explains more than half of the increase in food insecurity. Some of the remaining unexplained increase in food insecurity may be due to the sharp increase in food prices (online appendix figure 1) or loss of free or reduced-price school meals due to school closures.¹² Food insecurity rates remain elevated but have come down somewhat from their April peak, with overall rates of 22 percent in May and 20 percent in June (32 percent and 27 percent for respondents with children, respectively).

Other measures of real-time hardship are also elevated. Figure 2 displays the share of households reporting receipt of emergency food from a food bank, food pantry, or church, based on an annual time series 2002–2018 drawn from the CPS-Food Security Supplement collected each December that asks about receipt of emergency food over the past month. The solid

12. While many schools continued to offer grab-and-go meals, according to our calculations from the Census Household Pulse Survey fewer than 10 percent of households with children report receiving “free meals through the school or other programs aimed at children.” Ananat and Gassman-Pines (2020) find that 11 percent of low-income families reported picking up a grab-and-go meal at their child’s school in the first weeks of school closures. Usually 58 percent of students are eligible for free or reduced-price meals at school.

Figure 2. Households Receiving Food from a Food Bank/Pantry or Church



Source: Authors' tabulations of CPS Food Security Supplement (CPS-FSS) and Census Pulse Survey. Notes: The share of households (solid) or households with children (dashed) who reported using a food bank, pantry, or church sometime in the last month from the CPS-FSS for December 2002–2018. The square (circle) plots the share of households (households with children) who received a meal from a food pantry, food bank, or church in the past week, based on the Census Pulse Survey pooled across April 23–May 26. Statistics are weighted to be representative of all US households, using household weights in the CPS-FSS and calculating pseudo-household weights in the Census Pulse Survey by dividing the respondent weight by the number of adults in the household.

and dashed lines present trends for households overall and for those with children. The previous peak, in 2014, showed 2.8 percent of households receiving emergency food (3.6 percent for households with children) per month. The point estimates for the COVID-19 period represent responses from the Census Household Pulse Survey (averaged across months May through July 2020), which asked respondents to report on emergency food from these sources over the past week. Comparing across data sources, *weekly* receipt of free food is at or above its previous peak *monthly* rate reaching 4.3 percent of households (6.3 percent of those with children).¹³

In addition, measures of mental health are also being tracked in real time during COVID-19 and show elevated rates of distress across three

13. The COVID Impact Survey also asks about receipt of food over the past seven days from a food pantry and finds even higher estimates—6.8 percent for respondents overall and 8.3 percent among those with children, averaged across their three waves of data collected from April to June.

categories: whether the respondent had little interest in doing things; whether the respondent felt down, depressed, or hopeless; or whether the respondent felt nervous, anxious, or worried. During COVID-19, the share of adults reporting mental health problems in the past week has increased compared with rates from 2017–2018, suggesting serious distress.¹⁴ Rates are generally higher among those with lower levels of education, and this gradient persists during COVID-19 (see online appendix table 4).

The Census Household Pulse Survey also asks respondents to rate their confidence in their ability to pay for basic needs in the coming weeks. In May, more than half of respondents indicated they are not “very confident” in their ability to pay for the food they need in the next four weeks, with 9 percent indicating they are “not at all confident.” These rates are uniformly higher among respondents with children and are higher among respondents with lower levels of education (see online appendix table 5). Among those who have a rent or mortgage payment, 43 percent overall and 51 percent of those with children did not have “high confidence” that they could make their next payment. Together, the evidence suggests that households and individuals are struggling across a variety of dimensions during COVID-19.

II. The Policy Response: How Much Money Is Going to Whom and When?

Between the Families First Coronavirus Response Act (passed March 18) and the CARES Act (passed March 27), more than \$1 trillion have been allocated in relief and assistance nationally. Four elements are particularly important for lower-income families: expansions to SNAP, the new P-EBT program that provides payments to compensate for missed school meals, expansions to UI, and the onetime economic impact payments (EIP). As we will show, these four policies account for about \$600 billion and are the main response of direct payments to households. Here we track what we know about the magnitude of these benefits, who they went to, and the timing of their activation.

By design, and even without congressional action, SNAP is structured to respond quickly to increased need. Households that newly become eligible due to unemployment or other loss of income can apply for SNAP and generally receive benefits within thirty days. Indeed, across states, SNAP

14. The 2017–2018 data measures are for the past two weeks.

participation increased more between February and April in states with larger increases in unemployment rates (see online appendix figure 3) following the pattern found in prior downturns (Bitler and Hoynes 2016).¹⁵ Additionally, during COVID-19 Congress made temporary changes that increased both participation and (for many participants) benefit levels. Usually, SNAP benefits are reduced as a household's income increases, with a maximum monthly benefit in fiscal year 2021 of about \$170 per person reduced by 30 cents for each additional dollar in income (after allowable deductions).¹⁶ While state and federal health emergencies are in progress, states can award all SNAP participants the maximum benefit (a provision known as the Emergency Allotment). This increases SNAP spending (holding participation constant) and provides an average increase in benefits of 40 percent to those on SNAP with higher incomes, such as the working poor (for whom SNAP tops up earnings) who have been at particular risk for job loss. To date there has been no benefit increase for the most disadvantaged SNAP recipients who were already receiving the maximum benefit. Additionally, states are temporarily allowed to extend eligibility periods for currently participating households for six months—under normal circumstances recipients are required to reapply for benefits every 6 to 12 months—so offices already stretched by health-related office closures and the need to socially distance could concentrate on screening new applicants. This temporary policy change increased SNAP participation by reducing the flows *out* of the program during the pandemic.

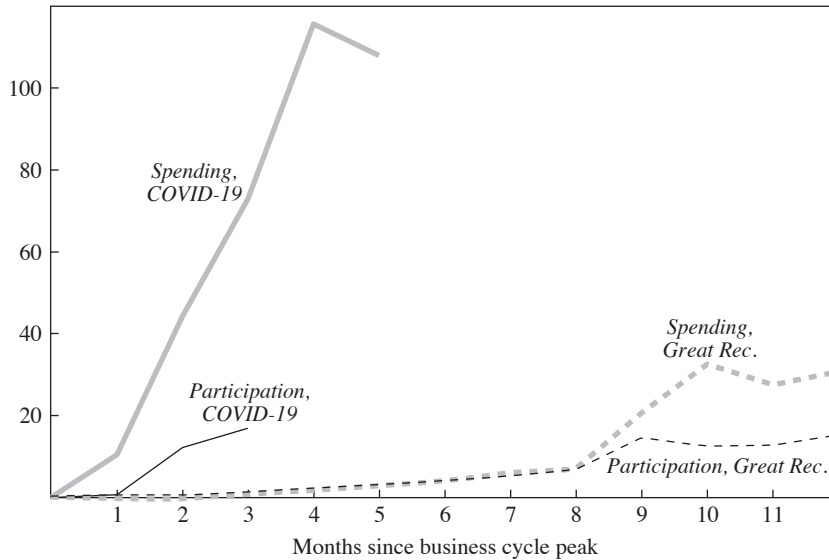
As a result, SNAP spending and participation are increasing with unprecedented speed, as shown in figure 3, but as we show below, the magnitude is small relative to UI and the economic impact payment. Although national data on SNAP participation only come with some lag, the figure presents the percentage increase in SNAP participation (dark solid line) across forty-three states that have released their data for April or May (these states account for 97 percent of SNAP participation). Relative to February, SNAP participation increased by 12 percent in April, and by 17 percent by May. For comparison, SNAP participation increases during the Great Recession are shown as the dark dotted line. It took 9 months to see the same SNAP participation increase during the Great Recession,

15. Worth noting, Florida experienced the largest increase in SNAP participation, likely due in part to their strong administrative system for SNAP developed to quickly deploy Disaster-SNAP after hurricanes. Rosenbaum (2020) provided SNAP data.

16. The maximum benefit for a family of four in fiscal year 2021 is \$680 or \$170 per person (USDA 2020).

Figure 3. Percentage Increase in SNAP Participation and Spending Since Business Cycle Peak: COVID-19 versus Great Recession

Percent increase in SNAP participants, spending since business cycle peak



Source: Authors' calculations of Great Recession spending and caseload data, and February 2020 caseload data, from USDA, Food and Nutrition Service, SNAP Data National Level Annual Summary.

Notes: Growth in caseloads in March–May 2020 calculated from states that have reported caseload data as of July 31, 2020. Forty-three states released April SNAP participation (42 states in May), and these states made up 97 percent of all SNAP participation in February. Growth in SNAP spending in 2020 is reported in Daily Treasury Statements through July 31, 2020. All series are plotted as growth by month since the business cycle peak, which was December 2007 for the Great Recession and February 2020 for the COVID-19 recession.

but of course unemployment also grew more slowly during that recession.¹⁷ SNAP spending (light solid line) is calculated using daily Treasury statements and compares spending on SNAP by month through July relative to spending in February. Some of the spending increase is due to the new P-EBT program, which provides benefits patterned after SNAP to families who lost access to free or reduced-price meals due to school closures. By the end of July, SNAP spending has more than doubled. Our calculations suggest about 20 percent of the increase is explained by increases in participation, 40 percent is due to paying all participants the maximum

17. Online appendix figure 4 shows the growth of SNAP spending and participation for the twelve months leading up to the unemployment rate peak during the Great Recession. The patterns are qualitatively similar.

benefit, and 40 percent is from P-EBT payments. Some of this increase will end once state and federal health emergencies end. Spending grew much more slowly during the Great Recession (light dotted line) and increased substantially when the 15 percent increase in maximum SNAP benefits authorized by Congress as part of the American Recovery and Reinvestment Act stimulus package was implemented.

The congressional policy response also included large expansions to UI, including a \$600 per week supplement, a 13-week extension of fully federally funded benefits, and an expansion of eligibility for self-employed and gig-economy workers and other patches to reach workers who were previously excluded from eligibility (under the new Pandemic Unemployment Assistance or PUA program).¹⁸ The number of UI participants has increased to record levels, with 34.5 million total continuing claims through the week ending July 4, as shown in online appendix figure 5. After their early May peak, regular continuing claims have started to decrease while PUA claims, after considerable delay in initiation, started to increase.

The onetime economic impact payments included in the CARES Act provide \$1,200 per adult (\$2,400 for a married couple) and \$500 per dependent under 17. This was structured as a fully refundable tax credit, phased out beginning at annual incomes of \$150,000 for married couples, \$112,000 for head of household filers, and \$75,000 for single filers. The Treasury provided automatic payments for all who filed federal taxes in tax years 2018 or 2019 as well as many elderly or disabled individuals receiving payments through Social Security or Veteran's Affairs programs.¹⁹ However, entire families that included any immigrant adult without a Social Security number were ineligible, thus excluding many citizen children and spouses (if not in the military). The initial payments were made to those with direct deposit information during the week of April 17 and paper checks followed more slowly after that.

Putting this all together, figure 4 shows weekly spending on economic impact payments, UI, and SNAP (including P-EBT) calculated from daily Treasury statements.²⁰ The increase in UI payments has averaged

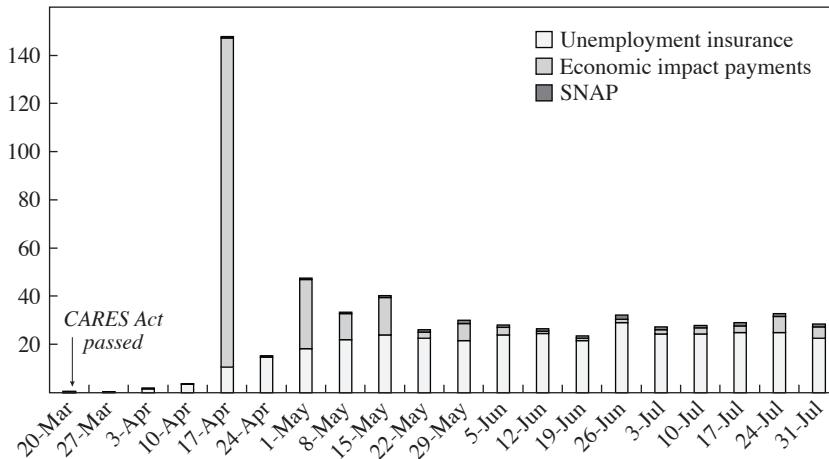
18. The federal government also is funding the "waiting" week for UI, so benefits get out more quickly, and most states suspended search requirements for obtaining UI during the health crisis through May at least.

19. Some of the Social Security Administration groups had to submit forms to receive dependent payments.

20. Here we follow Tedeschi (2020), who estimates economic impact payments and UI payments by calculating year-over-year changes by week. We also use this approach for SNAP spending.

Figure 4. Weekly Spending on Unemployment Insurance, Economic Impact Payments, and SNAP

New spending per week, billions



Source: Authors' tabulations of Daily Treasury Statements through July 31 for SNAP, unemployment insurance benefits, and IRS tax refunds to individuals.

Notes: We difference expenditures from the inflation-adjusted same-week payments in 2019 to net out the seasonality in payments and to separate economic impact payments from usual tax refunds. We censor economic impact payments at zero prior to the week of April 17.

\$23.5 billion per week from May through July. We estimate \$131 billion in economic impact payments were made in mid-April when the direct deposit payments were made, with smaller amounts paid in subsequent weeks as the paper checks rolled out. Increases in SNAP, the only program with payments narrowly targeted to low-income families, hover around \$1 billion per week, with some weekly fluctuation due to variation across states in the timing of monthly SNAP benefit payments and disbursement of P-EBT benefits. Between these three categories of spending, nearly \$600 billion in new expenditures occurred between April and July—almost \$360 billion through UI, \$220 billion through economic impact payments, and just over \$16 billion in new spending came through SNAP.²¹

There is some emerging evidence that these payments are helping alleviate hardship. For example, unemployed workers who report receiving UI have lower levels of food insecurity than do those who unsuccessfully attempted to receive UI. Food insecurity rates reported in the COVID

21. Online appendix figure 6 shows cumulative weekly spending using the same data.

Impact Survey dropped from 23 percent in April to 20 percent in June for respondents overall, and from 34 percent to 27 percent among respondents with children (figure 1). Furthermore, new evidence finds that receipt of P-EBT payments decreases measures of food hardship (Bauer and others 2020). Despite noteworthy improvements, these measures are still extremely elevated, and are generally worse for families with children, and for Black and Hispanic respondents.

III. With This Policy Response, Why Is There Need?

Given the policy response to date, why do we see such large unmet economic need? There are three driving factors: delays in the receipt of payments that were authorized, modest benefit levels (for programs other than UI), and holes in coverage. In this section, we describe elements of the policy implementation, including slow rollout, cumbersome administrative processes, as well as more structural deficiencies.

The available real-time evidence shows that despite high levels of aggregate claims, many workers, especially those with low levels of education, are not receiving UI. We establish this finding from survey and administrative data sources, and it is consistent with experiences during previous recessions. Panel A of table 1 presents data from week 3 of COVID Impact Survey data collected May 30–June 6.²² We tabulate data on receipt of UI and SNAP among workers reporting being on furlough. The survey asks “In the past 7 days, have you either received, applied for, or tried to apply for any of the following forms of income assistance, or not?” and the interviewer asks about UI and SNAP. The table presents the responses separately for those with a high school education or less, some college, or a college degree or more. The results show striking disparities in access to UI payments; among furloughed persons with a high school degree or less, 42 percent were receiving UI compared to 52 percent for those with a college degree or more. And this disparity in access to UI is consistent with prior recessions. Panel B of table 1 presents a similar gradient for the Great Recession using the 2008 Panel of the Survey of Income and Program Participation (SIPP). Using the sample of individuals in short-term unemployment near the trough of the Great Recession, 29 percent of those with a high school degree or less were receiving UI compared to 47 percent of college

22. COVID Impact Survey: Version 1, National Opinion Research Center, University of Chicago, <https://www.norc.org/Research/Projects/Pages/covid-impact-survey.aspx>.

Table 1. Program Receipt among the Unemployed

	Any UI (%) (1)	Any SNAP (%) (2)	Both UI and SNAP (%) (3)	Neither (%) (4)
<i>Panel A: Furloughed individuals, June 2020</i>				
≤ High school	42	11	6	52
Some college	55	24	18	38
Bachelor degree or higher	52	9	6	46
<i>Panel B: Short-term unemployed individuals, 2008</i>				
≤ High school	29	29	6	48
Some college	37	21	5	47
Bachelor degree or higher	47	6	3	50

Source: Authors' tabulations of the COVID Impact Survey (panel A) and the 2008 SIPP Panel (panel B).

Note: We tabulate data on receipt of UI and SNAP, where the survey asks "In the past 7 days, have you either received, applied for, or tried to apply for any of the following forms of income assistance, or not?" The sample consists of those reporting they are unemployed due to furlough at the time of the survey. Panel B includes individuals age 20–59 who were unemployed and looking for work for at least a week in the first month of wave 6 of the 2008 SIPP (January–April 2010) and had been unemployed for fewer than four months. Receipt of UI and SNAP is measured for the first month of wave 6. UI refers to own receipt and SNAP refers to receipt within the household. All statistics are weighted to be representative of the adult population.

graduates. It is also important to note that this table suggests that there is only partial overlap between UI and SNAP receipt among the unemployed/furloughed, and a substantial share obtain SNAP but not UI. Around half of furloughed (during COVID-19) or short-term unemployed (during the Great Recession) report receiving neither UI nor SNAP.

To explore why UI does not reach all unemployed workers, now and in previous recessions, we use the 2019 CPS Annual Social and Economic Supplement (which covers the 2018 calendar year) and the 2020 UI calculator in Ganong, Noel, and Vavra (2020) to simulate the share of individuals age 20–59 with positive earnings who would be eligible for UI (under normal UI rules, i.e., without federal expansions) if they became unemployed.²³ There are sharp disparities in eligibility, with much lower

23. The code for the Ganong, Noel, and Vavra (2020) calculator is available at https://github.com/ganong-noel/ui_calculator. Ganong, Noel, and Vavra (2020) also present eligibility estimates using their calculator; their approach differs slightly from ours. They focus on all workers who are US citizens, have hourly wage and salary earnings above the federal minimum wage, and who are eligible for UI based on their earnings history. Our sample differs in that we restrict the sample to workers age 20–59 and expand it to include all workers regardless of immigration status and with any positive earnings, not just those with wage and salary earnings above the federal minimum wage. When estimating potential eligibility should they be laid off and average weekly benefits, we treat workers who are likely unauthorized immigrants as ineligible for UI benefits. We also ignore self-employment income in determining UI eligibility and benefits.

eligibility rates for those in lower-income families (see online appendix figure 7). For workers in families with income below 100 percent of poverty, only 63 percent are eligible for UI compared to 87 percent among all workers. Among those with income below poverty, 14 percent of the ineligible are unauthorized (not eligible to work legally), another 7 percent are ineligible due to being self-employed, and 17 percent are authorized and have wage and salary earnings, but do not meet the work history requirements.²⁴ Importantly, the new PUA provisions in the CARES Act have attempted to fill the gap in eligibility for the self-employed and those with insufficient work history so it is possible that more of these 7 + 17 percent now have UI eligibility; changes have not altered ineligibility rates for unauthorized workers. Thus, as many as 14 percent of those under the poverty level may still be ineligible under the best-case scenario. In addition, there is widespread variation in the share of those unemployed who obtain UI conditional on being eligible. O’Leary and Wandner (2020) report that in 2018, the share of the eligible unemployed receiving UI ranged from 10.5 percent in North Carolina to 95 percent in Rhode Island. Murray and Olivares (2020) report that states with higher rates of pre-COVID-19 UI utilization among those eligible are paying out more claims in the COVID-19 era, suggesting a role for administrative burdens.

Next, we turn to real-time administrative data to assess how the UI system responded to this unprecedented increase in unemployment. Ideally we would present, weekly and by state, the number of persons receiving regular UI, PUA, and the \$600 supplement, along with the dates of initiation for the new programs. While we (and others) have made valiant attempts to assemble this, as of this writing there is no systematic data source available to identify this information. One approach is to use Department of Labor reports of weekly continuing claims. However, many concerns have been raised about the use of continuing claims to capture the number of recipients, particularly for PUA. First, the count of continuing claims is the number of weeks times people, not the number of people; this is particularly problematic when there are delays in processing and back payments are issued with first payments.²⁵ Second, continuing claims can include claimants who are still pending a determination and denials can occur after this stage (Hedin, Schnorr, and von Wachter 2020). Additionally, PUA continuing claims appear to be inconsistently reported during the

24. We follow Passel (2007) to identify survey respondents as unauthorized immigrants.

25. For example, if it takes four weeks to process the claim when the first payment is made, it will count “4” in continuing claims that week due to the back pay.

COVID-19 crisis.²⁶ Another approach is to use Department of Labor reports of weekly initial claims, yet these also have weaknesses, including subsequent denials, double counting due to returning to UI after brief return to work, and, particularly for PUA, capturing possible fraud.²⁷

Despite these data challenges, the available evidence clearly points to significant delays, especially in the rollout of PUA across states. This is not surprising, as states had to design entirely new methods to ensure eligibility for PUA, and states varied widely in their administrative capacity and the need for social distancing in the early months of the pandemic. Additionally, for a state to receive federal reimbursements for PUA, its recipients must be ineligible for state UI. In practice, in some states PUA applicants must apply to and be rejected from the regular UI program before they could separately apply for PUA, leading to further delays. Using information from state press releases, we can document significant delays and wide differences in when PUA was first paid out, ranging from as early as March in New Hampshire (which had passed a program expanding UI to the self-employed even before the CARES Act), to April 30 in California, to May 11 in West Virginia, and May 26 in Kansas.²⁸ States also varied in the timing of their payment of the federal supplemental \$600 weekly payment (FPUC) which was meant to go to all UI recipients.

Using less granular monthly data, we can also calculate for the United States a more reliable measure of the UI *utilization rate* by taking the ratio of “first UI payments” available monthly for regular and PUA UI from the Department of Labor (currently through May 2020 for all states

26. Take Florida for example: the first initial claim reported to Department of Labor for PUA was for the week ending June 27 despite an April 25 press release announcing people could start applying for PUA. Additionally, there have been no continuing claims reported as data were downloaded August 9, yet the state data dashboard reports they have paid out \$453 million of PUA as of August 9. Using data shared by Murray and Olivares (2020) and Cajner and others (2020), we document similar discrepancies between the timing of when the first week first claims were reported to the Department of Labor and when states reported that they started accepting PUA claims, with at least twenty-three states accepting PUA applications at least seven days before the first week of initial claims was reported to Department of Labor, and with the average difference being twenty-nine days. We thank them for generously sharing their data.

27. For example, the state of Ohio froze 270,000 claims as of August 7 in order to investigate fraud at a time when about 500,000 PUA claims had been paid, and the US Labor Department inspector general raised concerns about fraud in a May 26 Alert Memorandum.

28. Many states also started by sending PUA applicants the minimum payment (plus, where relevant the additional \$600 federal payment), and then later determined actual payment eligibility amounts and sent back payments where appropriate.

reporting PUA first payments) to the total number of unemployed.²⁹ First payments get around the problem of subsequent denials as well as being an unduplicated count of recipients. Combining regular state UI and PUA first payments, we find that 6.4 percent of the unemployed had received a first payment in March, rising to 53.9 percent in April and 84.9 percent in May (see online appendix table 6). If we limit to payments for PUA, we find 1.6 percent of the unemployed received a first payment by April 2020 rising to 11 percent in May.

In summary, the combination of real-time survey and administrative data, the historical patterns, and policy changes during COVID-19 suggest that while UI is serving the majority of the unemployed, it is far from universal. During COVID-19, UI has been slow to reach the unemployed and there is a sizeable share—disproportionately those with low levels of education—who are not receiving benefits. This is consistent with available pre-COVID-19 evidence.

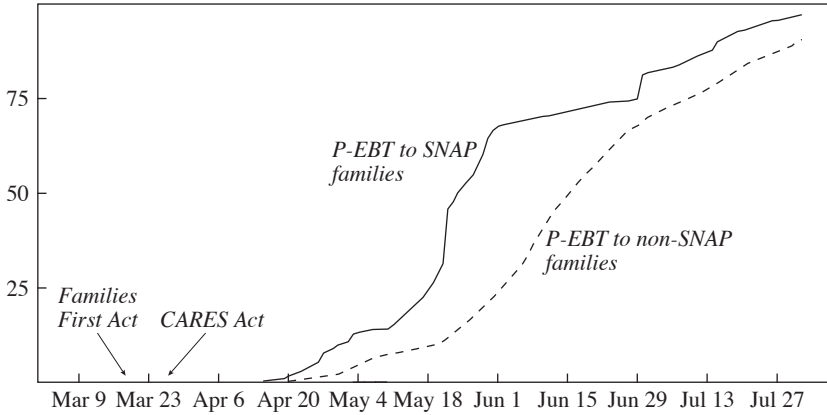
Coverage was incomplete for the economic impact payments as well. According to the daily Treasury statements (shown in online appendix figure 6), cumulative payments for the onetime economic impact payments (\$1,200 per adult and \$500 per child under 17) through the end of July 2020 are around \$215 billion. However, despite the apparent universality of the payment for those with income below the high-income phase-out level, the design of the payment scheme has left out the most disadvantaged Americans. First, the law excludes immigrant families who are deemed ineligible if any adult or spouse lacks a Social Security number (unless the family included a member of the military).³⁰ Second, the payments were sent automatically, with no additional action, for tax filers (in 2018 or 2019) and those receiving benefits from the Social Security Administration or Veterans Affairs. Marr and others (2020) estimate that 12 million nonfilers are eligible for the relief payment but did not automatically receive it. Instead, to receive these payments individuals are required to apply for the payment through a new IRS nonfiler tool. This nonfiler population is a disadvantaged group with low incomes, and an

29. Regular and PUA UI first payments come from the 902P and 5159 forms from the Department of Labor, respectively. Pandemic Emergency Unemployment Compensation first payments are very small, so we exclude them from the graphs. For the denominator we use CPS monthly estimates of those unemployed (adjusted for changes in those with a job but not at work and not in the labor force over the previous year).

30. Also ineligible are adult dependents, 17-year-olds, and college students whom their parents can claim as dependents.

Figure 5. Timing of Pandemic Assistance Payments for P-EBT

Share of children participating in National School Lunch Program living in states disbursing P-EBT (percent)



Source: Bauer and others (2020), and authors' calculations from state departments of health services.

Note: The solid (dashed) line displays the share of children who participate in the National School Lunch Program who live in states that have disbursed P-EBT payments to families receiving free or reduced-price meals who also participate in SNAP (do not participate in SNAP).

estimated three-quarters of them are eligible for SNAP or Medicaid. Based on the Urban Institute Coronavirus Tracking Survey, wave 1—fielded between May 14 and May 27—41 percent of adults with income below poverty reported that they had not received their economic impact payment compared with 27 percent among those with income between 100 and 250 percent of poverty and 14 percent among those with income between 250 and 400 percent of poverty (Holtzblatt and Karpman 2020).

Another source of delay in benefits reaching needy families came from having to create a new program in the midst of the pandemic. When schools across the United States closed in mid-March, 30 million students lost daily access to free or reduced-price school meals. To offset this loss, Congress authorized the new P-EBT program to provide food benefits to families who lost subsidized school meals. In order to participate, though, states had to set up and receive approval from the USDA for this completely new program. Payments came out slowly, as shown in figure 5. Two months after the Families First Act authorized the program, very few states had made payments; about 15 percent of eligible families lived in states where P-EBT benefits began being dispersed to those on

SNAP (where preexisting debit cards could be used), and fewer than 10 percent lived in states where non-SNAP recipients eligible for school meals programs were dispersing P-EBT benefits. Many states did not make retroactive payments until June or July.

In sum, this discussion illustrates the delays and incomplete coverage in the policy response. Also, among those eligible we have incomplete take-up of these programs. Why? This is a direct result of the “application-based” policy environment. Across the different relief provisions, some payments were made automatically (recovery rebate for previous tax filers, increase in SNAP benefit for existing participants) while others required application (UI, recovery rebate for some nonfilers, P-EBT for those not on SNAP in some states). Decades of research show that take-up rates are incomplete when an application is required. Individuals need to know about the programs to access them (Currie 2006). Administrative hassles are built into many programs and contribute to the less-than-complete take-up (Herd and Moynihan 2019). In addition, as the COVID-19 crisis has highlighted, states have made policy choices that result in differential capacity to quickly enroll newly unemployed individuals.

IV. Putting the Policy Response in the Context of the Broader Social Safety Net

The COVID-19 crisis has been met with an extraordinary economic policy response. It is important to understand, though, that the US social safety net—the foundation beneath this policy response—has been redesigned in recent decades in ways that have made it less responsive to economic downturns. In the years following the Great Recession, many states have reduced the generosity of their UI programs. Median replacement rates to low-income workers are below 50 percent in many states (online appendix figure 8), providing very limited earnings replacement. More generally, our social safety net has shifted toward a work-conditioned social safety net, using earnings subsidies to increase incomes among workers but offering relatively little out-of-work assistance (to those not elderly or disabled). These changes have been ushered in through the 1996 welfare reform law, expansions to the earned income tax credit (EITC), and, for some populations, work requirements for SNAP. More recently, work requirements have been adopted in some states for Medicaid and regulations implemented to expand SNAP work requirements. The result is a social safety net with an emphasis on promoting and rewarding work, a system that

may be adequate during times of low unemployment but provides too little insurance against job loss and economic shocks.³¹

Recent work by Bitler, Hoynes, and Iselin (2020) and Bitler and Hoynes (2016) summarizes how participation in SNAP, UI, the EITC, and cash welfare varies with the unemployment rate at the state level, and how that has changed over time. In the period since 2007, only UI shows a robust countercyclical response, with a 1 percentage point increase in unemployment leading to an 18 percent increase in UI spending (Bitler, Hoynes, and Iselin 2020). SNAP has a weaker response, with a 1 percentage point increase in the unemployment rate leading to a 7 percent increase in SNAP spending. Neither the work-conditioned EITC nor cash welfare systematically change in response to the economy. In other words, despite its important role in reducing poverty, the EITC is poorly suited to insure consumption against job loss.³²

Overall, the literature shows that on the eve of the COVID-19 crisis, the safety net was providing uneven and incomplete protection. While UI is strongly countercyclical overall, not all unemployed workers receive benefits, including undocumented immigrants and those with inconsistent work histories. Cash welfare does not respond to aggregate economic need, and the EITC is not designed to provide insurance against job loss. SNAP does have the capacity to expand during economic downturns, but benefits are modest, and since its benefits are food vouchers they are only partially fungible. In addition, recent policy changes risk further dampening the protective effects of SNAP by imposing stricter work requirements among nondisabled adults without dependents and reducing participation among immigrants and families with mixed immigration status.³³

31. For reference, antipoverty effects of existing programs in 2018 for children, adults with and without children, and the elderly are presented in online appendix figure 9. The EITC has the largest antipoverty impact for children and adults who live with them, followed by SNAP, housing assistance, and school meals. Among the elderly and childless adults, Social Security overwhelmingly has the largest antipoverty effect.

32. Bitler, Hoynes, and Kuka (2017) show that lack of cyclicity of the EITC masks two opposing responses: a procyclical effect for single filer EITC recipients (whose EITC payment falls or is lost altogether with economic shocks) and a countercyclical effect for married filers (or more generally those with higher predicted earnings) for whom a labor market shock can bring them down into EITC eligibility.

33. When labor market conditions are poor, states can waive SNAP time limits when particular economic conditions (based on employment statistics in the state or local area) are met, so that food assistance is not conditional on employment during bad economic times. The Trump Administration issued a new rule effective April 1, 2020, making it more difficult to obtain time-limit waivers. Importantly, the new rule requires that states have elevated unemployment rates for at least the previous twelve months, slowing the ability of the program to respond to immediate need at the onset of an economic downturn.

V. Needed Policies Moving Forward

Our analysis leads us to two sets of recommendations. The first set of recommendations relates to changes that need to occur in the short-term to address the current recession. The increased payments authorized by Congress for UI, SNAP, and for missed school meals have been crucial if incomplete responses, but all are in danger of not being continued as cases continue to surge at the time of this writing. For example, the \$600/week UI supplement was allowed to expire at the end of July, and PUA (covering the self-employed) is scheduled to expire at the end of December. The temporary increase in SNAP payments is not tied to the state of the economy, but instead is only authorized through the duration of national and state health emergencies. P-EBT has not yet been extended into the 2020 school year for students who are engaged in remote learning. This potential rollback in support is occurring despite an unemployment rate that still exceeds the maximum rates experienced in the Great Recession. It is too soon to phase down increased payments that provide crucial relief to families experiencing hardships. The current policy response, in particular those applying to UI and SNAP, should remain in place and be phased out only as the economic emergency recedes.

As a general matter, we have designed a safety net that needs an additional boost during recessions. Usual state UI systems generally provide low payments (as a share of wages) for a short duration. SNAP benefits are modest and are intended to supplement other food resources. The EITC tops up low earnings but is not countercyclical. Because these limitations are known, and since there is a high cost both to policy uncertainty and to delays in relief payments, we think it is wise to build automatic expansions into key safety net programs during recessions, as proposed in Boushey, Nunn, and Shambaugh (2019). For example, following the successful policies of the 2009 stimulus, maximum SNAP benefits should be increased by 15 percent (thereby reaching those most disadvantaged recipients who did not gain from the current SNAP expansions). In order to support a work-based safety net, the UI system should be redesigned to provide more insurance and to reach a larger share of disadvantaged unemployed workers during recessions, for example by making permanent the pandemic expansions to UI that extended coverage to self-employed and gig workers and to those with limited work histories, although this may require rethinking the UI tax system for these groups. We need to build a harmonized federal and state data system to facilitate automated relief payments to all eligible Americans. For example, information from

state-administered SNAP and Medicaid data systems should have been available to the Treasury to facilitate EIPs for this group. Finally, this crisis has made clear the need for states to increase their administrative capacity for their programs, particularly UI.

VI. Conclusions

The COVID-19 recession is unlike previous recessions due to its depth and speed of onset. In response to this shock, Congress enacted a number of smart short-term fixes to the safety net that have improved its ability to insure low-income families during this recession, including increasing UI payments and extending eligibility, increasing SNAP payments to some participants, sending cash relief payments (EIP), and introducing a new program to replace missed school meals (P-EBT). Without question, these policies have improved the responsiveness of the safety net to this crisis and have reduced suffering that would have occurred without these actions.

Even with these valuable policy responses, there is still tremendous unmet need. Food insecurity has sharply increased, as has the share of families relying on emergency food pantries. Some excess suffering occurred because much of the policy response was slow to roll out and reach needy families. The available yet incomplete data suggest a sizeable subset who experienced shocks and have not received safety net payments; for example, some workers who lost their jobs are not receiving benefits from UI or SNAP. In addition, there remain great economic risks if additional policy responses are removed too quickly, because the underlying US safety net does not provide adequate protection during recessions.

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