

APPENDIX TABLES & FIGURES

Appendix Table 1. Changes in Measures of Unemployment, Has a Job but Not at Work, and Not in the Labor force, Adults 18-64 by Education

	Unemployed	Unemployed/has job not at work	Unemployed/has job not at work/ NILF	Has job not at work	NILF
Panel A: Means in February					
Mean in February, all	0.030	0.048	0.275	0.018	0.227
Mean in February, HSDO/HS grad.	0.043	0.059	0.362	0.017	0.303
Mean in February, some college	0.028	0.045	0.289	0.018	0.244
Mean in February, 4 year college	0.018	0.039	0.167	0.021	0.127
Panel B: Regressions, month FE, all 18-64 year olds					
Coeff. March 2020 dummy	0.005	0.010	0.013	0.006	0.002 ^{NS}
Coeff. April 2020 dummy	0.080	0.112	0.141	0.033	0.029
Coeff. May 2020 dummy	0.069	0.088	0.108	0.018	0.021
Coeff. June 2020 dummy	0.055	0.058	0.071	0.003	0.013
Panel C: Same as Panel B, HSDO/HS grad.					
Coeff. March 2020 dummy	0.007	0.014	0.022	0.007	0.008*
Coeff. April 2020 dummy	0.094	0.137	0.178	0.043	0.041
Coeff. May 2020 dummy	0.082	0.103	0.134	0.022	0.030
Coeff. June 2020 dummy	0.058	0.064	0.091	0.006	0.027
Panel D: Same as Panel B, some college					
Coeff. March 2020 dummy	0.003*	0.008	0.016	0.006	0.008 ^{NS}
Coeff. April 2020 dummy	0.096	0.133	0.171	0.037	0.038
Coeff. May 2020 dummy	0.087	0.111	0.139	0.024	0.027
Coeff. June 2020 dummy	0.068	0.073	0.090	0.006	0.016
Panel E: Same as Panel B, 4 year college					
Coeff. March 2020 dummy	0.004	0.008	0.006 ^{NS}	0.004*	-0.001 ^{NS}
Coeff. April 2020 dummy	0.053	0.073	0.088	0.020	0.015
Coeff. May 2020 dummy	0.044	0.055	0.065	0.011	0.010
Coeff. June 2020 dummy	0.044	0.041	0.047	-0.003 ^{NS}	0.006 ^{NS}

Notes: Author's calculations based on pooled monthly CPS data for adults 18-64, Panel A, and 24 months ending in June 2020 in Panels B-E. Regressions in Panel B-E show coefficients on dummies for March 2020, April 2020, May 2020, and June 2020. Regressions in Panel B-E control for month in year dummies. All regressions use using monthly CPS weights. Panel C shows outcomes for Panel B specification for HS DO/HS graduates. Panel D is same but for some college folks. Panel E is same but for those with a 4 year degree. Outcomes are own occurrence for adults 18-64. Estimates of changes all significant at at least the 5% level with state level clustering unless coefficient has * (significant at the 10% level) or ^{NS} (insignificant). N is 1,652,477 for the full sample; 606,065 for the HSDO/HS graduate sample; 466,257 for the some college sample; and 557,431 for the 4 year college degree sample. 22,722 members of the full sample did not report their education level.

Appendix Table 2. Changes in Probability a Child Lives with Someone Age 18-64 by Employment Outcomes

	Unemployed	Unemployed/has job not at work	Unemployed/has job not at work/ NILF	Has job not at work	NILF
Panel A: Means, children in HH with 18–64 YO in HH					
Mean in February, all	0.064	0.100	0.613	0.039	0.558
Mean in February, HSDO/HS grad.	0.093	0.127	0.704	0.038	0.642
Mean in February, some college	0.064	0.098	0.602	0.035	0.548
Mean in February, 4 year college	0.036	0.078	0.533	0.042	0.483
Panel B: Regressions, month FE, all heads with 18–64 YO in HH					
Coeff. March 2020 dummy	0.013	0.023	0.010 ^{NS}	0.012	0.002 ^{NS}
Coeff. April 2020 dummy	0.126	0.180	0.101	0.062	0.025
Coeff. May 2020 dummy	0.121	0.152	0.084	0.037	0.021
Coeff. June 2020 dummy	0.099	0.106	0.068	0.012	0.023
Panel C: Same as Panel B, HSDO/HS grad. head with 18–64 YO in HH					
Coeff. March 2020 dummy	0.021	0.031	0.020*	0.013	0.003 ^{NS}
Coeff. April 2020 dummy	0.151	0.217	0.118	0.080	0.034
Coeff. May 2020 dummy	0.148	0.182	0.093	0.038	0.032
Coeff. June 2020 dummy	0.120	0.121	0.093	0.005 ^{NS}	0.057
Panel D: Same as Panel B, some college head with 18–64 YO in HH					
Coeff. March 2020 dummy	0.009 ^{NS}	0.028	0.023*	0.020	0.021*
Coeff. April 2020 dummy	0.147	0.204	0.136	0.065	0.052
Coeff. May 2020 dummy	0.148	0.193	0.137	0.054	0.054
Coeff. June 2020 dummy	0.112	0.130	0.096	0.021	0.035
Panel E: Same as Panel B, 4 year college head with 18–64 YO in hh					
Coeff. March 2020 dummy	0.009*	0.014	-0.008 ^{NS}	0.004 ^{NS}	-0.011 ^{NS}
Coeff. April 2020 dummy	0.095	0.137	0.069	0.045	0.0007 ^{NS}
Coeff. May 2020 dummy	0.080	0.099	0.057	0.025	0.004 ^{NS}
Coeff. June 2020 dummy	0.078	0.076	0.045	0.006 ^{NS}	0.007 ^{NS}

Notes: Author's calculations based on mean for February, 2020 in Panel A and 24 months ending in June 2020 in Panels B-E. Regressions in Panel B-E show coefficients on dummies for March 2020, April 2020, May 2020, and June 2020. Regressions in Panel B-E control for month dummies. All regressions use using monthly CPS weights. Panel C shows outcomes for Panel B specification for HS DO/HS graduates. Panel D is same but for some college folks. Panel E is same but for those with a 4 year degree. Outcomes are occurrence for children in in HH with a 18–64 year old. Estimates of changes all significant at at least the 5% level with state level clustering unless coefficient has * (significant at the 10% level) or ^{NS} (insignificant). Sample sizes are 604,766 for all children in HH which have an adult 18–64; 207,987 for all children in HH with an adult 18–64 which have a HH head who is a HSDO or HS graduate; 171,209 for all children in HH with an adult 18–64 which have a HH head who has some college; and 202,432 for all children in HH with an adult 18–64 which have a HH head who has a 4 year college degree.

Appendix Table 3. Person-level Food Hardship Measures, NHIS and CPS-FSS

<i>Panel A. CPS-FSS (annual recall)</i>								
Food Insecurity		Food Just Didn't Last		3-Category Food Insufficiency		2-Category Food Insufficiency		
	Respondents Overall	Respondents w/ Children	Respondents Overall	Respondents w/ Children	Respondents Overall	Respondents w/ Children	Respondents Overall	Respondents w/ Children
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2005	12.1%	15.5%	13.1%	16.1%	22.6%	26.5%	3.5%	4.0%
2006	12.1%	15.7%	13.1%	16.4%	22.7%	26.9%	3.8%	4.4%
2007	12.2%	15.8%	13.4%	16.8%	23.1%	27.7%	4.0%	4.8%
2008	16.4%	21.2%	17.0%	21.2%	28.3%	33.3%	5.4%	6.5%
2009	16.6%	21.8%	17.4%	21.9%	28.1%	33.6%	5.3%	6.3%
2010	16.1%	20.5%	16.8%	20.8%	27.6%	32.2%	5.1%	5.9%
2011	16.4%	20.8%	17.7%	21.7%	27.5%	32.1%	5.2%	5.9%
2012	15.9%	20.3%	17.1%	21.1%	26.9%	31.2%	5.2%	6.0%
2013	15.8%	20.1%	16.8%	20.7%	26.5%	31.3%	5.2%	6.0%
2014	15.4%	19.4%	16.8%	20.8%	25.9%	30.3%	5.4%	6.2%
2015	13.4%	16.7%	14.7%	17.7%	23.1%	27.1%	4.8%	5.3%
2016	12.9%	16.3%	13.8%	16.7%	21.7%	25.0%	4.3%	4.8%
2017	12.5%	15.7%	13.3%	15.9%	21.2%	24.3%	4.1%	4.5%
2018	11.5%	14.0%	12.5%	14.8%	20.4%	23.5%	3.8%	3.9%

<i>Panel B. NHIS (30-day recall)</i>				
	Respondents Overall (1)	Respondents w/ Children (2)	Respondents Overall (3)	Respondents w/ Children (4)
2011	13.3%	15.7%	16.3%	19.7%
2012	12.5%	14.9%	15.4%	18.8%
2013	11.3%	13.5%	14.2%	17.3%
2014	11.2%	13.2%	13.6%	16.4%
2015	9.9%	11.4%	12.2%	14.5%
2016	9.8%	11.5%	12.1%	14.4%
2017	9.2%	10.5%	11.4%	13.3%
2018	8.8%	9.6%	11.0%	12.5%

Notes: Panel A is authors' calculations from the Current Population Survey-Food Security Supplement (CPS-FSS), 2005-18; Panel B is authors' calculations from the National Health Interview Survey (NHIS), 2011-18. All columns are respondent-weighted, with odd columns representative of all adults and even columns representative of adults with children living in the same household. Columns (1)-(2) represent food insecurity status, coded from the full food security battery, following USDA guidelines to code a respondent as 1 if he or she answered yes (including "often", "sometimes," "almost every month," and "some months but not every month") to at least 3 of the 10 food security questions (3 of 18 questions if a child is in the household). Columns (3)-(4) indicate whether a respondent indicated that it was often/sometimes true that "the food that (I/we) bought just didn't last, and (I/we) didn't have money to get more." Columns (5)-(6) in Panel A are coded as one if the respondent described the food eaten in the household in the last 12 months as "enough but not always the kinds of food we want," "sometimes not enough" or "often not enough." Columns (7)-(8) of Panel A are coded as one if the respondent answered only sometimes/often enough to the question described in columns (5)-(6). The food sufficiency screener question is not collected in the NHIS. CPS-FSS asks about food hardship over prior 12 months, while NHIS asks about the prior 30 days.

Appendix Table 4. Share of Adults Reporting Mental Health Problems in the Past Week

	2017-2018	During COVID-19
	(1)	(2)
Panel A: Had little interest in doing things		
Overall	24.5%	53.4%
<= High School	28.6%	56.5%
Some College	26.3%	56.2%
College +	17.2%	47.0%
Panel B: Felt Down, Depressed, or Hopeless		
Overall	23.4%	50.3%
<= High School	26.0%	53.1%
Some College	26.4%	51.9%
College +	17.0%	45.3%
Panel C: Felt Nervous, Anxious, or Worried		
Overall	33.8%	59.8%
<= High School	34.3%	58.1%
Some College	35.5%	61.3%
College +	31.5%	60.4%

Notes: Authors' tabulations of National Health and Nutrition Examination Survey (NHANES) 2017-18 and Census Household Pulse Survey averaged across April 23 – May 26, 2020. The reference period for NHANES is the past two weeks for “little interest” and “feeling down” and the past week for “felt nervous”. The reference period for the Census Pulse is the prior week for all three questions. Statistics are weighted to be representative of adults in the United States.

Appendix Table 5. Confidence in Ability to Afford Food, Pay Rent/Mortgage During COVID-19

	Confidence in ability to pay for food in next 4 weeks		Confidence in ability to make next rent/mortgage payment	
	“Not at all confident” (1)	Not “very confident” (2)	“No confidence” (3)	Not “high confidence” (4)
Panel A. Households Overall				
Overall	9%	53%	9%	43%
<= High School	14%	66%	14%	57%
Some College	9%	58%	9%	47%
BA +	3%	31%	3%	24%
Panel B. Households with Children				
Overall	11%	61%	11%	51%
<= High School	17%	77%	18%	68%
Some College	11%	66%	11%	54%
BA +	4%	34%	4%	25%

Notes: Authors’ tabulations of the Census Household Pulse Survey averaged across April 23 – May 26, 2020. Respondents are asked to rate their confidence in their ability to afford food over the next four weeks, choosing an answer from the following options: not at all confident, somewhat confident, moderately confident, very confident. Respondents are separately asked to rate their confidence in their ability to pay the next month’s rent/mortgage payment on time, choosing an answer from the following options: no confidence, slight confidence, moderate confidence, high confidence, or the payment is/will be deferred. Statistics are weighted to be representative of adults in the United States.

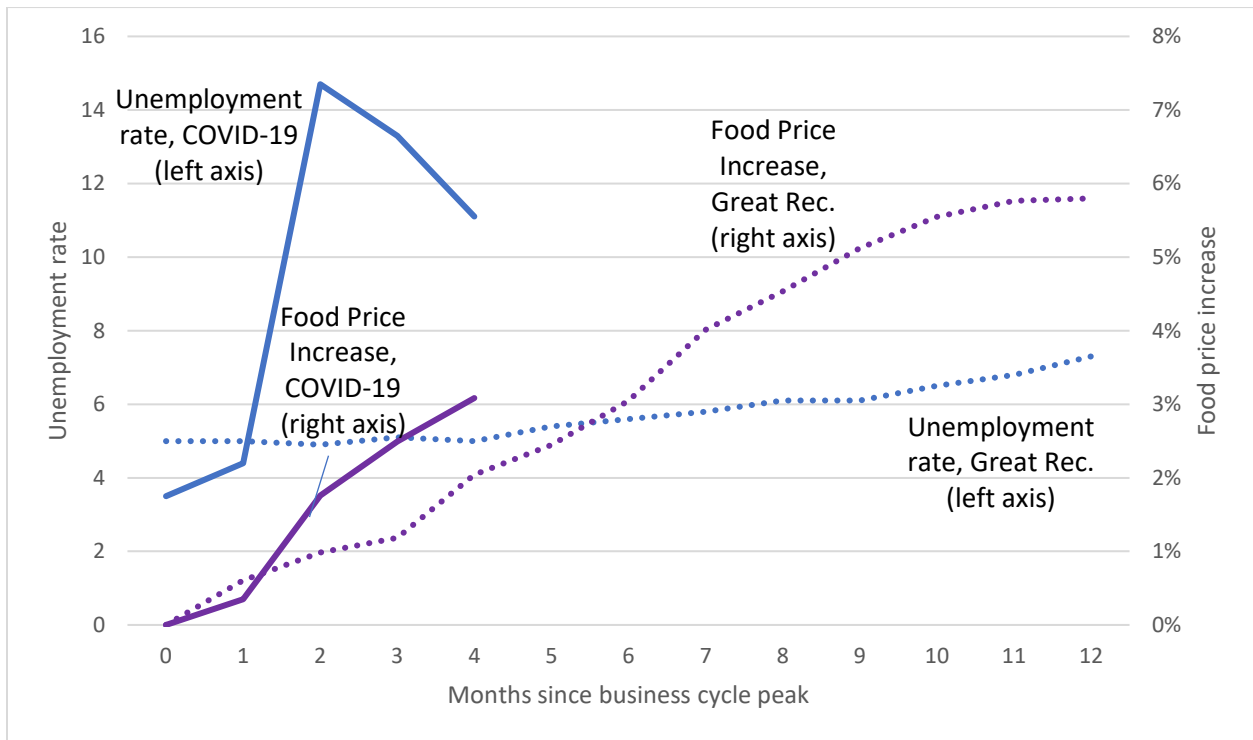
Appendix Table 6. UI First Payments as a Ratio of the Unemployed

	UI First Payments: Includes Regular State Payments and PUA (1)	UI First Payments: Includes PUA (2)
Panel A: Ratio of Cumulative UI First Payments to Unemployed		
March 2020	0.064	0.000
April 2020	0.539	0.016
May 2020	0.849	0.110
Panel B. Cumulative UI First Payments		
March 2020	1,700,460	0
April 2020	14,210,795	416,911
May 2020	22,391,176	2,899,797
Panel C. Number of Unemployed		
Average March-May	26,365,418	Same as column 1

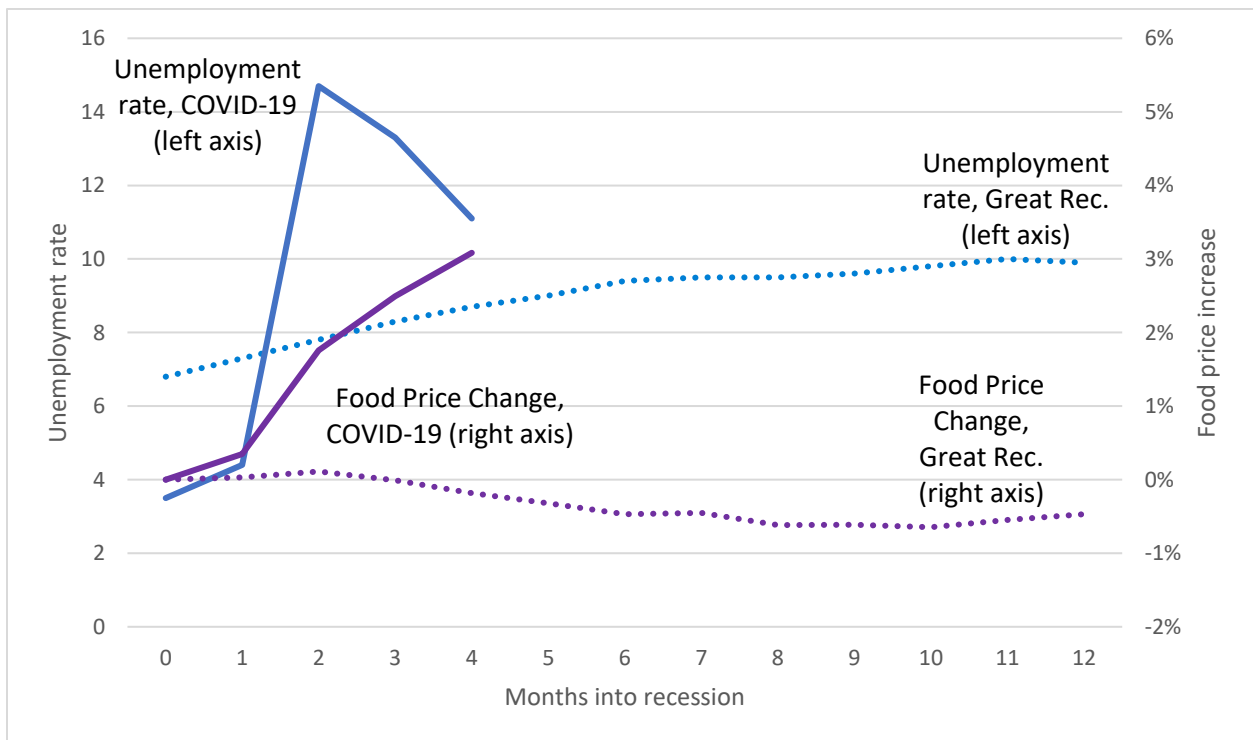
Notes: This table presents tabulations of the ratio of cumulative first monthly payments for unemployment insurance by month to the average stock of unemployed persons across March 2020-May 2020 (Panel A) as well as the numerator (Panel B) and denominator (Panel C) presented separately. The cumulative first payments represent the number of persons receiving a first UI payment. The numerator in column 1 is the sum of first payments for PUA (from the Department of Labor's (DOL) 902P report) and first payments for state UI (from DOL 5159 report). The numerator in column 2 is the PUA first payments. These are reported in the analogous columns of panel B. Panel C contains the denominator--the average number of those unemployed from the monthly CPS data adjusted to include the year over year change in those with a job and not at work and not in the labor force. CPS measures are averaged using population weights.

Appendix Figure 1. Unemployment and Food Price Growth

Panel A. Great Recession vs. COVID-19



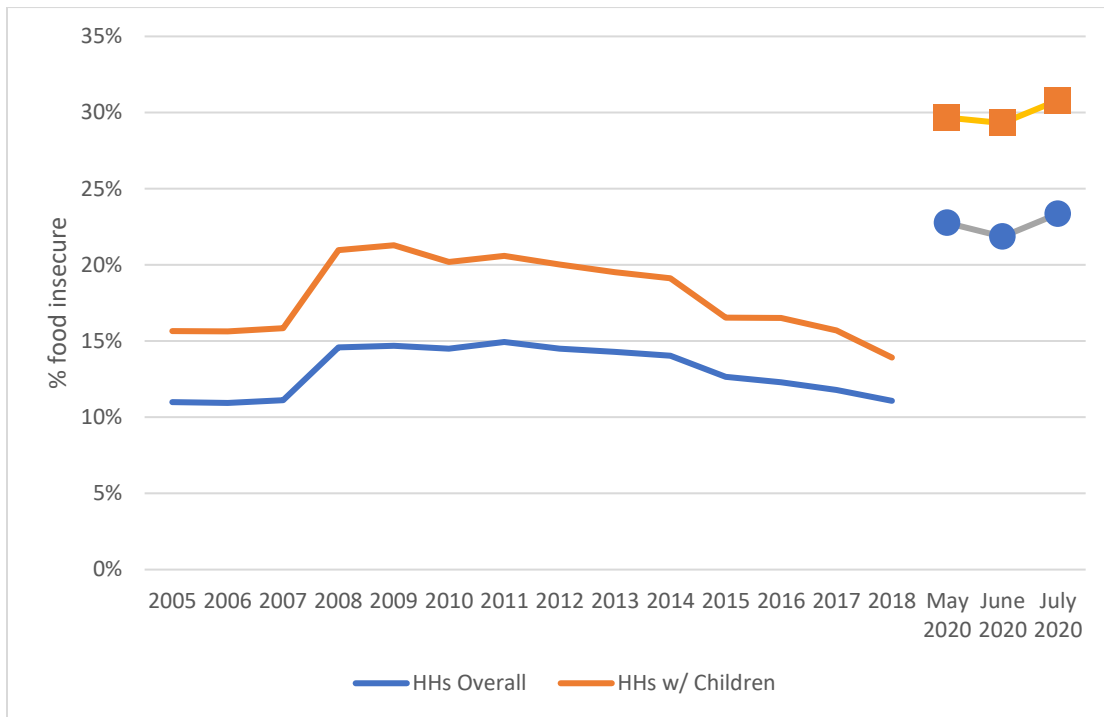
Panel B. Great Recession Peak vs. COVID-19 Start



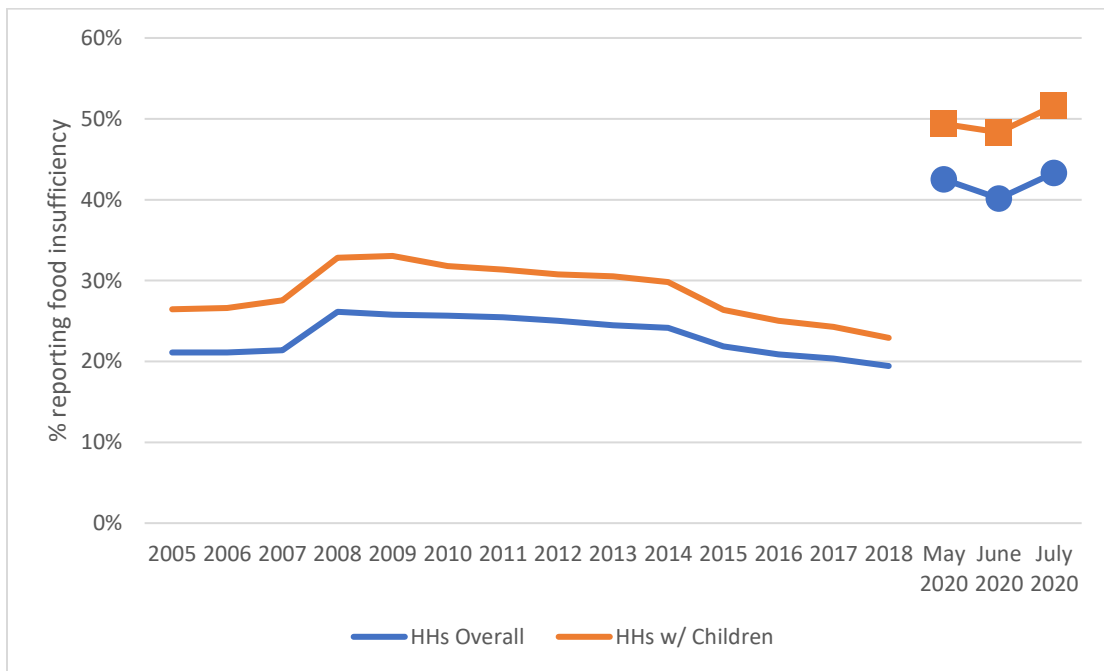
Notes: Authors' calculations of seasonally adjusted monthly unemployment rates (in blue) for the Great Recession (dotted lines) and COVID-19 crisis (solid lines). The figure also plots the change, relative to base period, in food prices (purple lines) for the two periods. COVID-19 plotted by month since the February 2020 economic peak. In Panel A, the Great Recession is plotted relative to the December 2007 economic peak; in panel B the data are plotted for the 12 months leading up to the November 2009 unemployment rate peak (November 2008-November 2009).

Appendix Figure 2. Food Hardship Measures, Overall and Households with Children

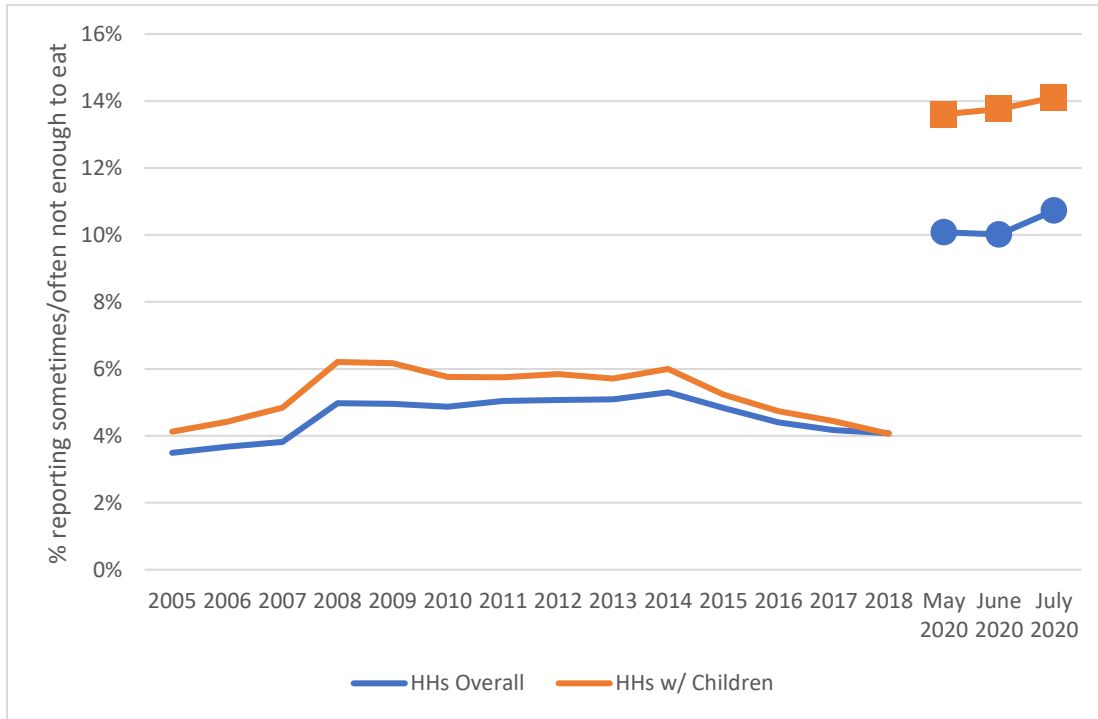
Panel A. Percent of Households Reporting Food Insecurity



Panel B. Percent of Households Reporting Food Insufficiency

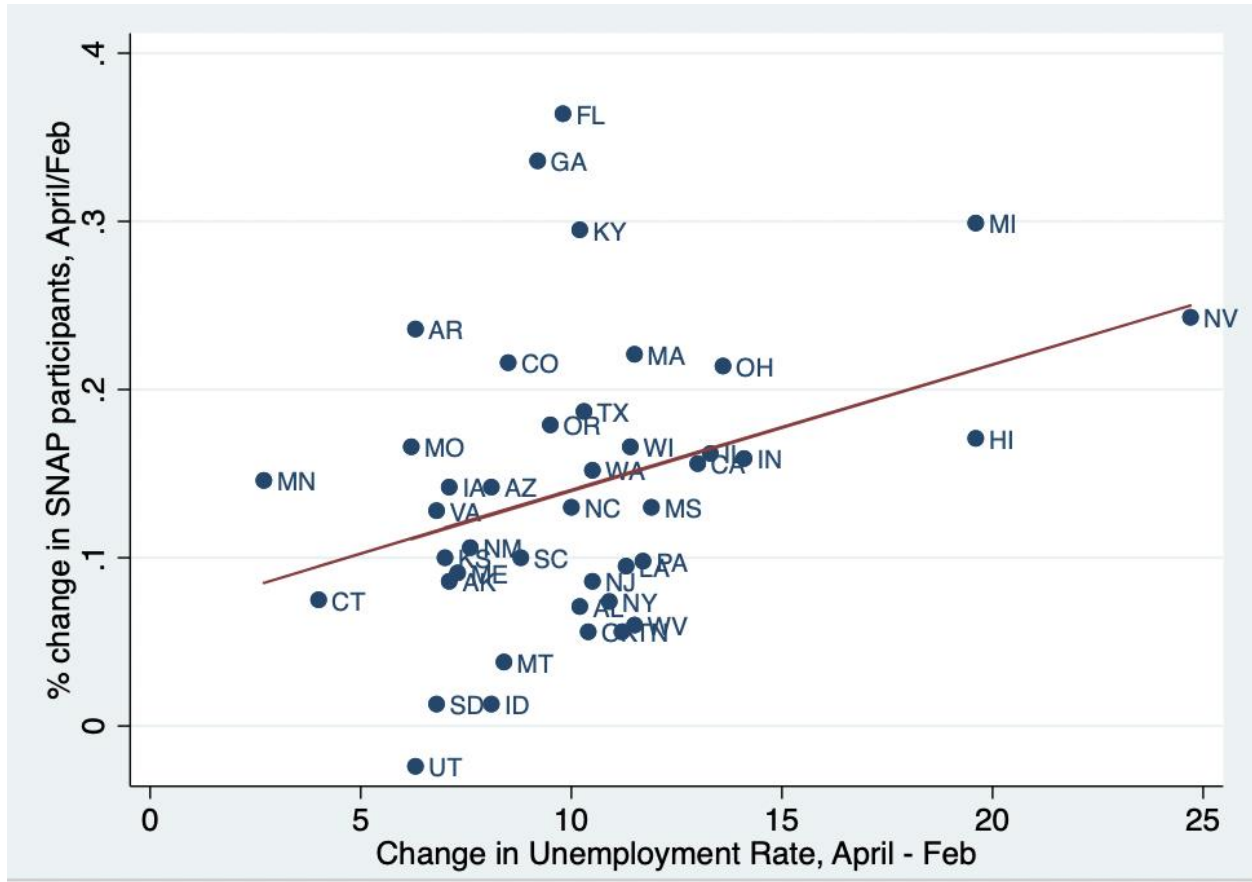


Panel C. Percent of Households Reporting Sometimes/Often Not Enough to Eat on Food Sufficiency Question



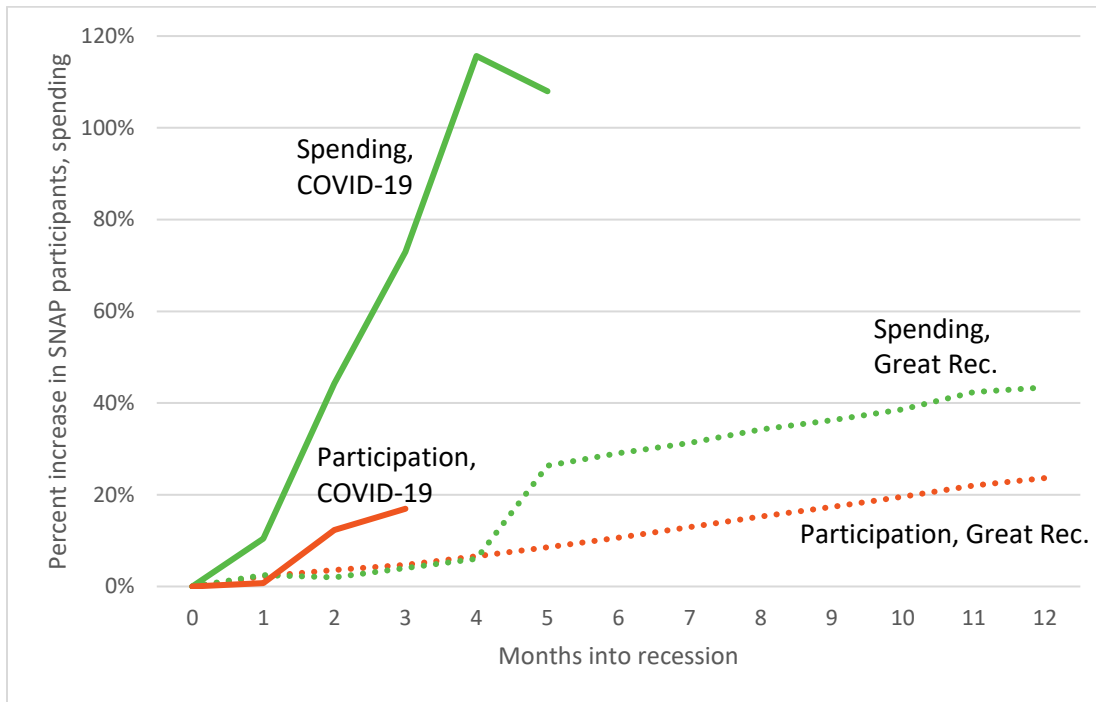
Notes: All panels are authors’ calculations from the Current Population Survey-Food Security Supplement (CPS-FSS), 2005-18, and the Census Household Pulse Survey averaged across 3 periods in 2020: 4/23-5/26; 5/28-6/30; 7/2-7/21. The CPS-FSS asks both about food sufficiency and administers the full food security questionnaire, asking about experiences over the previous 12 months. The Census Household Pulse Survey includes a single question on food sufficiency and asks about experiences over the past week. Panel A 2005-18 represent food insecurity status, coded from the full food security battery, as recommended by USDA and described in notes to Appendix Table 3. Panel A 2020 data points are food security projections based on food sufficiency responses and the usual relationship between food security and food sufficiency in the CPS-FSS. Panel B represents the share of households responding that the food eaten in the household was “enough but not always the kinds of food we want,” “sometimes not enough” or “often not enough.” Panel C represents the share of households responding that the food eaten in the household was sometimes/often enough. Statistics are weighted to be representative of all U.S. 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.

Appendix Figure 3: Change in State Unemployment vs. SNAP Participation, February-April 2020



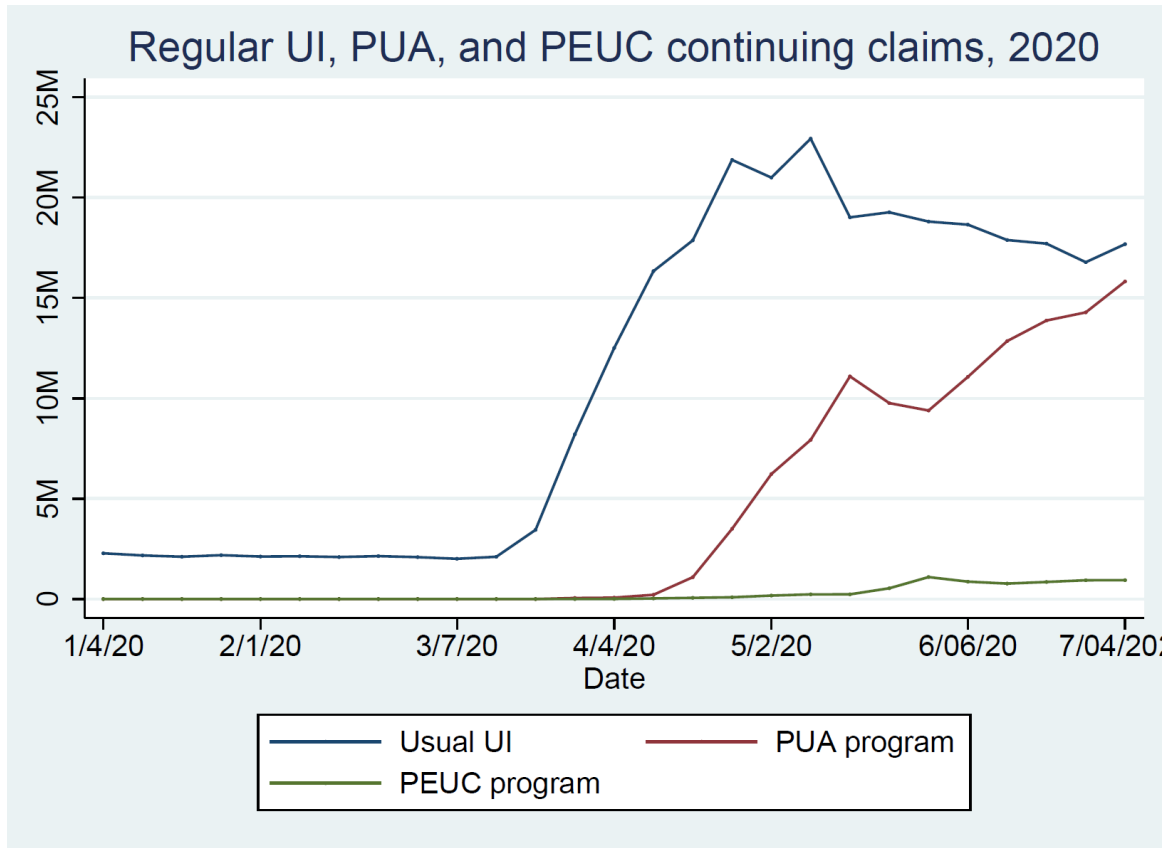
Notes: Plot of percent change in SNAP participation (y-axis) vs. change in seasonally adjusted unemployment rate (x-axis) by state. Percent change in SNAP caseloads from February to April 2020 calculated from 43 states that have reported caseload data as of July 31, 2020, covering 97% of all SNAP participation in February. Percentage point change in state unemployment rate covers February to April 2020 and comes from the BLS LAUS. The upward-sloping line represents the OLS regression line relating change in SNAP participation to change in unemployment rate.

Appendix Figure 4. Percentage Increase in SNAP Participation and Spending Since Business Cycle Peak: COVID-19 vs. Great Recession (Alternate Start Date)



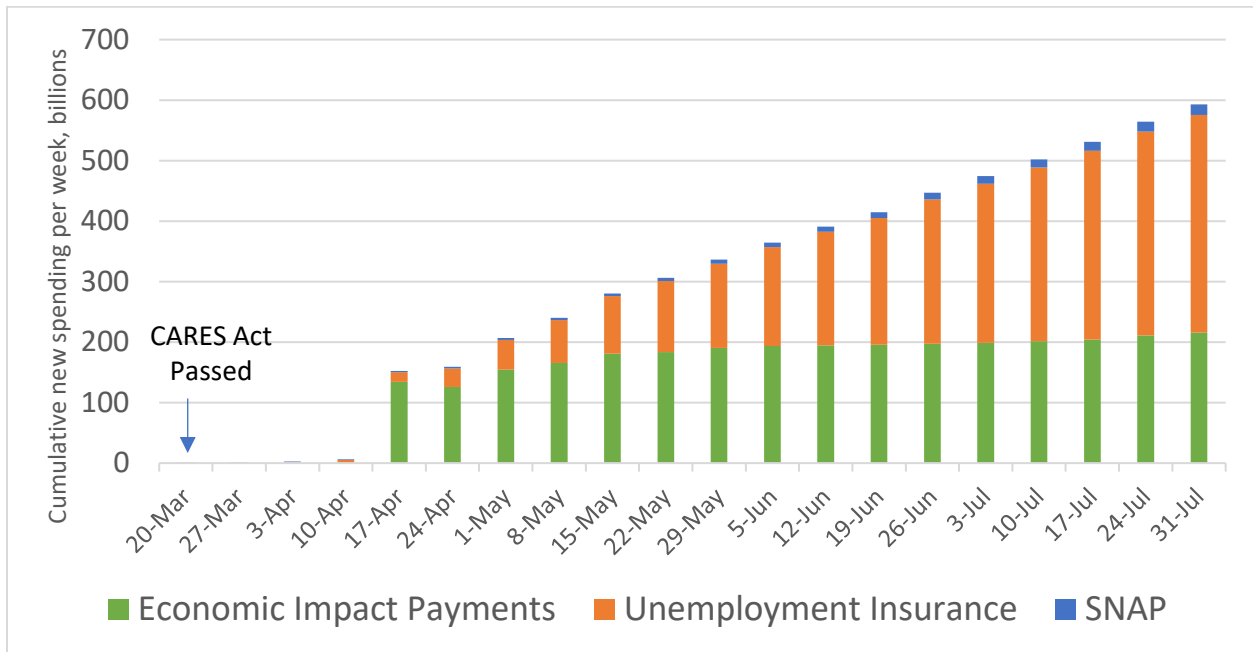
Notes: Authors' calculations of Great Recession spending and caseload data, and February 2020 caseload data, from USDA, Food & Nutrition Service, SNAP Data National Level Annual Summary. Growth in caseloads in March-May 2020 calculated from states that have reported caseload data as of July 31, 2020. 43 (42) states have released April (May) SNAP participation, and these states made up 97% (97%) of all SNAP participation in February. Growth in SNAP spending in 2020 is reported in Daily Treasury Statements through July 31, 2020. The COVID-19 series are plotted as growth by month since the February 2020 business cycle peak; the Great Recession data are plotted for the 12 months leading up to the November 2009 unemployment rate peak (November 2008-November 2009).

Appendix Figure 5. Continuing UI Claims, by Source



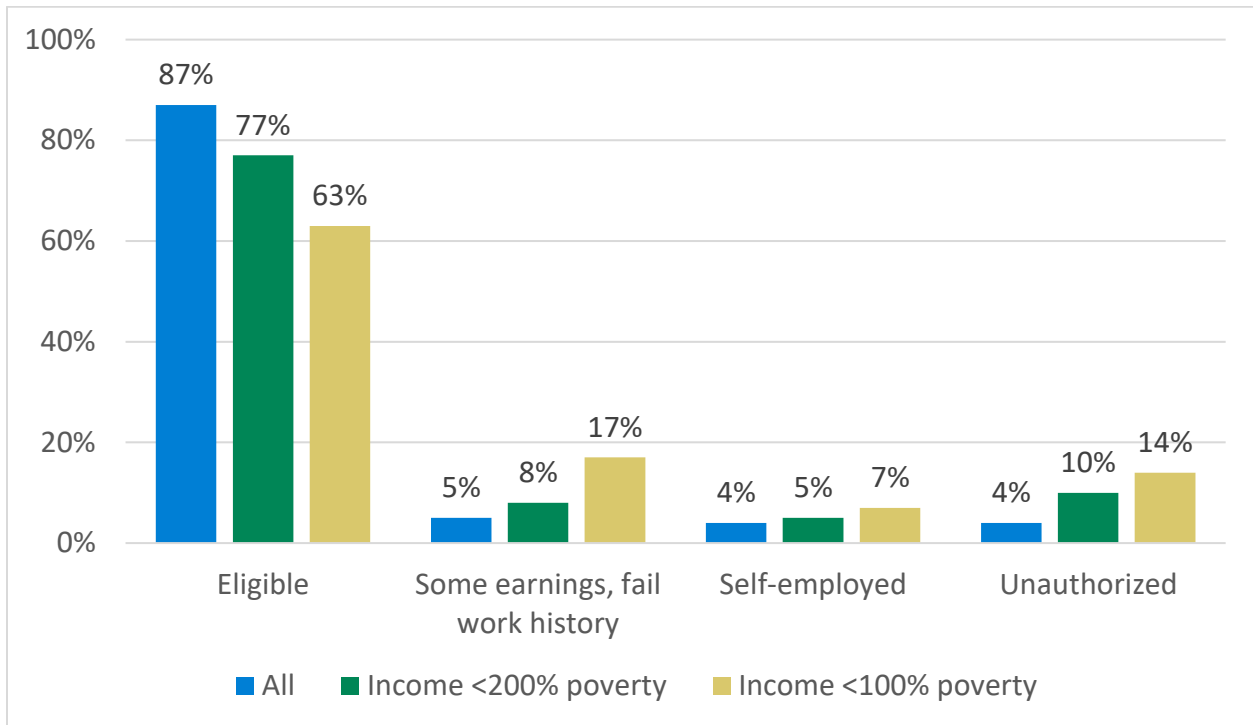
Notes: Data from Department of Labor and report not seasonally adjusted continuing claims by week of the claim for the United States. Usual UI represents the state and Federal-state extended benefit programs as well as Federal UI for federal employees and veterans, STC job sharing, and very small state programs which provide coverage after other benefits are exhausted (never exceed 5000 persons). The Pandemic programs include PUA and PEUC.

Appendix Figure 6. Cumulative New Spending on UI, Relief Rebates, and SNAP by Week (Billions of 2020\$)



Notes: Authors' tabulations of Daily Treasury Statements through July 31 for SNAP, Unemployment Insurance Benefits, and IRS Tax Refunds to Individuals. 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.

Appendix Figure 7. Eligibility for Unemployment Insurance Among Workers, and Reasons for Ineligibility, by Income

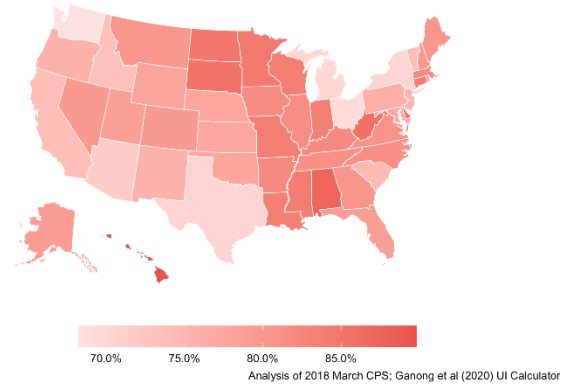


Notes: Authors' calculations use the 2019 CPS-ASEC and the UI calculator in Ganong et al. (2020). Sample includes individuals 20-59 who had any earned income in calendar year 2018. The blue bars are for the full sample, green bars are for the sample income under 200% of poverty, and yellow bars are for the sample under 100% of poverty. The first set of bars, labeled “Eligible”, plot the share of workers predicted to be eligible for UI benefits if the workers lost their jobs, based on earnings during the previous year and immigration status. The three sets of additional bars (right 9 bars) show the reasons the worker would be ineligible for UI. If a worker fell into multiple categories, we assigned based on the following hierarchy: 1) categorize as unauthorized if they are Hispanic, non-citizens, arrived in the United States after 1986, have a high school degree or less, and are 15 years of age or older; 2) categorize as some earnings, fail work history if not categorized as unauthorized and have some earnings; 3) had self-employment income, no wage and salary earnings. The CPI-U is used to inflate calendar year 2018 earnings to 2020 values for use with the 2020 UI calculator. Statistics are weighted to be population representative.

Appendix Figure 8: UI Eligibility and Replacement Rates in 2020, Workers in Families below 200 Percent of Poverty

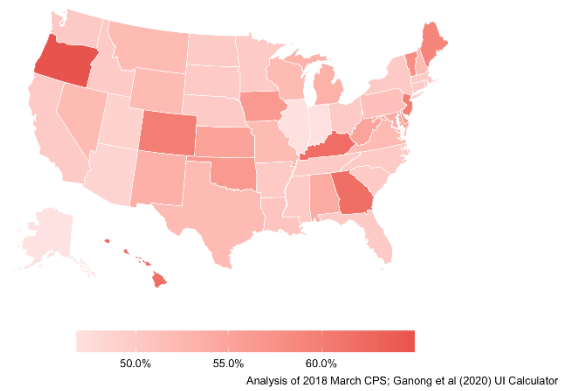
Panel A. Eligibility Rate

UI Eligibility Rate Among All Workers, by State
Below 200% SPM poverty line



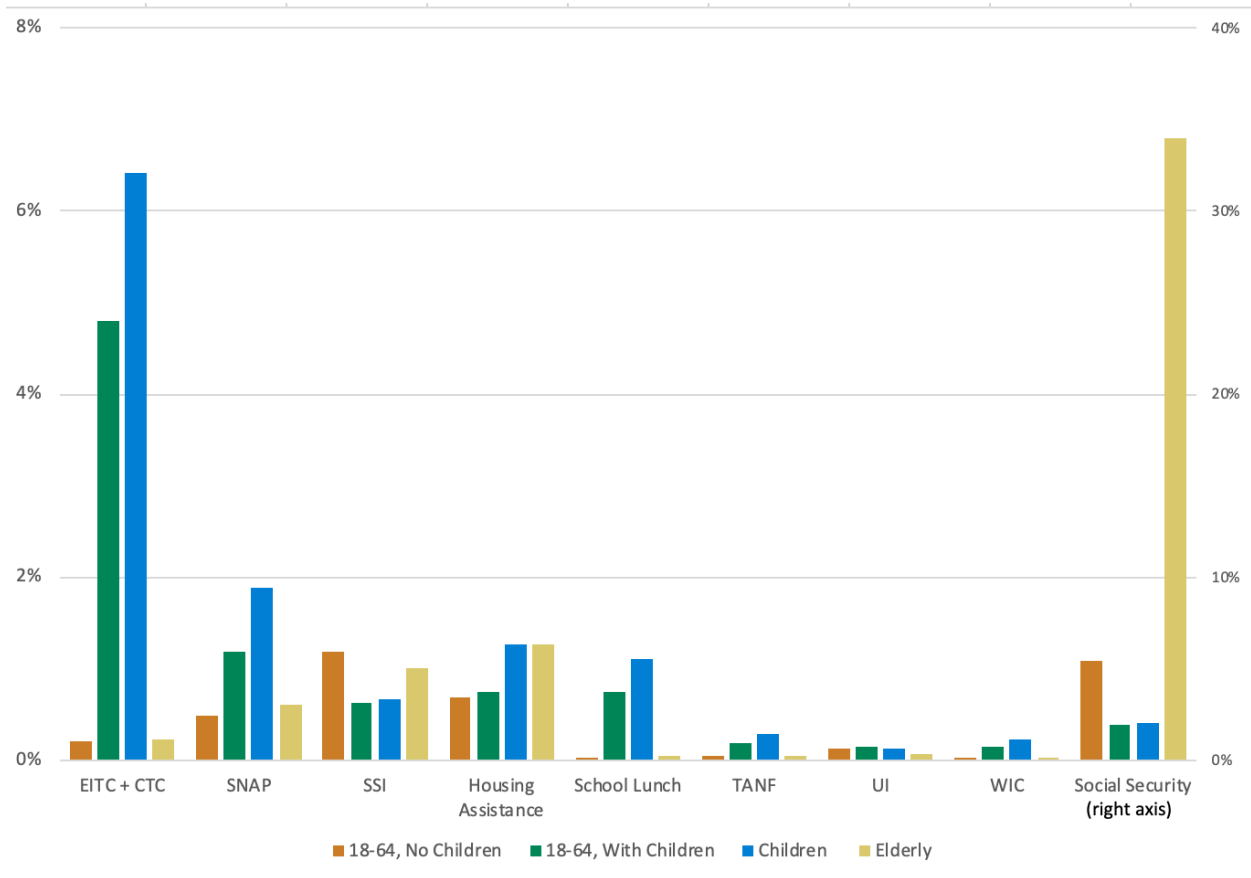
Panel B. Median Replacement Rate

Replacement Ratio Among Eligible Workers, by State
Below 200% SPM poverty line



Notes: Authors' calculations use the 2019 CPS ASEC and the UI calculator in Ganong et al. (2020). Sample includes workers ages 20-59 living in families with income below 200 percent of the Supplemental Poverty Measure. The figures show the share eligible (left) and the median replacement rate (right) by state. Calculations use all workers (for eligibility) and all eligible workers (for the replacement rate) and simulate UI benefits in the event that they are unemployed. The CPI-U is used to inflate calendar year 2018 earnings to 2020 for use with the 2020 UI calculator. Statistics are weighted to be population representative.

Appendix Figure 9. Anti-Poverty Effects of the Social Safety Net, by Group (2018)



Notes: Calculations based on authors' tabulations of 2019 CPS ASEC, covering annual data for calendar 2018. Poverty is calculated using the Supplemental Poverty Measure following Fox (2019), with no adjustment for underreporting of income. Each data point shows the impact on poverty rates of zeroing out a given income source. Statistics are weighted to be population representative. Bars represent the percentage-point reduction in SPM poverty in 2018, separately for children, adults 18-64 living with children, adults 18-64 not living with children, and the elderly age 65+.