

Recent Trends in the Material Well-Being of the Working Class in America

By
JAMES P. ZILIAK

I examine trends in the material well-being of working-class households using data from the Current Population Survey in the two decades surrounding the Great Recession. In the years leading up to the Great Recession, average earnings, homeownership, and insurance coverage all fell, and absolute poverty and food insecurity accelerated. After-tax incomes were, for the most part, stagnant. The economic hemorrhaging either abated or reversed, however, in the decade after the Great Recession, especially for the least skilled and for households headed by a Hispanic person. This includes robust earnings growth, which led to declines in earnings inequality, absolute poverty, and food insecurity, coupled with increased insurance coverage and a modest rebound in after-tax incomes. As many of these recent advances likely stalled with the onset of the COVID-19 pandemic, I discuss various policy options.

Keywords: income growth; poverty; health insurance; homeownership; food insecurity

The U.S. economy over the past two decades has been characterized by declining employment rates across gender and skill level, tepid income growth for much of the income distribution coupled with rising upper-tail inequality, and stalled upward mobility (Autor 2014; Abraham and Kearney 2020; Chetty et al. 2017; Saez and Zucman 2020; Shambaugh and

James P. Ziliak is the Carol Martin Gatton Endowed Chair in Microeconomics and University Research Professor, Department of Economics, University of Kentucky. He is founding director of the University of Kentucky Center for Poverty Research and the Kentucky Federal Statistical Research Data Center. He has published widely on the topics of labor economics, tax and transfer policy, poverty, and food insecurity.

NOTE: I am grateful to Isabel Brizuela for excellent research assistance and for the helpful comments of Rich Burkhauser, Gary Burtless, Robert Moffitt, and Tim Smeeding on an earlier version. The opinions and conclusions are solely those of the author and do not represent the views of any sponsor.

Correspondence: ziliak@uky.edu

DOI: 10.1177/00027162211021365

Strain 2021). Not all the news is bad, even for some households in the middle, and there is countervailing evidence challenging some of these claims (Auten and Splinter 2019; Strain 2020). However, most evidence points toward income growth in the last 20 years that falls short compared to preceding decades; and while the tax and transfer system undoes some of the rising inequality, it is increasingly skewed toward families with children (Blundell et al. 2018; Rose 2020; Wimer et al. 2020).

Despite these economic headwinds, the last two decades have been relatively quiet in terms of major social policy changes compared to the landmark tax and welfare reforms of the 1980s and 1990s. There was a robust response by Congress to expand the safety net during the Great Recession of 2007 to 2009, which mitigated much of the growth in pretax poverty and inequality (Burtless and Gordon 2011; Moffitt 2013; Larrimore, Burkhauser, and Armour 2015); but with the notable exception of the Patient Protection and Affordable Care Act of 2010 (ACA) that expanded health coverage to more vulnerable populations, there was little in the way of social-policy legislation.

While many papers have been written on these trends and for select subpopulations, one group for whom little has been documented is the working class. The working-class family eking out a hardscrabble existence from the farm or the factory features prominently in American lore (Terkel 1974). The major transformation of work away from physical labor in recent decades has shifted that narrative toward new economy service jobs such as the home health aide, the retail-sales clerk, or the call-center operator, but the result is the same in that these families are depicted as living one paycheck away from eviction and for whom the “American Dream” remains elusive (Ehrenreich 2001; Shieler 2005). The emphasis on the most disadvantaged workers is crucial, especially for our understanding of the effects of the social safety net, but it overlooks the semi-skilled laborer who likewise may identify as working class, but whose economic status is more closely aligned to the middle class with potentially divergent financial destinies. This raises important questions, such as, Have the level, composition, and growth of income changed for different groups of working-class households? What about rates of homeownership, the bellwether of the American Dream? What has happened to health insurance coverage among the working class, as well as risks of food insecurity? The aim of this article is to begin to address these questions by documenting trends in the material well-being of working-class households in the first two decades of the twenty-first century.

The next section describes the data used in the analyses, including a discussion of the choice of classifying the working class as households whose head or spouse has less than a four-year college degree. I then provide detailed trends in the composition, distribution, and growth of incomes, both across all working-class households as well as separately by education attainment, and, for some outcomes, by race and ethnicity. I focus on changes in labor and nonlabor income, including receipts from food assistance programs, along with tax payments inclusive of refundable tax credits. Cumulative growth in earnings and after-tax and transfer incomes is documented across the entire distribution over the whole sample period and separately by peak-to-peak business cycles before and after

the Great Recession. This is then followed by alternative measures of well-being, including homeownership, health insurance coverage by source (employer provided, publicly provided, and private purchase), and food insecurity as officially defined by the U.S. Department of Agriculture (Coleman-Jensen et al. 2020). The last section concludes with a discussion of policy options to improve the well-being of the American working class.

Defining the Working Class

The data for the analysis come from two supplements of the Current Population (CPS)—the Annual Social and Economic Supplement (ASEC), and the Food Security Supplement (FSS)—for the calendar years 2000 to 2019. This sample period spans the 2001 recession, the Great Recession of 2007 to 2009, and the subsequent economic expansion that was the longest on record. The ASEC, which is collected by the U.S. Census Bureau as a supplement to the monthly CPS labor-force survey, consists of about ninety thousand households in a typical year and serves as the official source of income and poverty statistics (Semega et al. 2020). Data from the ASEC are used here to examine trends in the composition and growth of income before and after taxes, homeownership, and health insurance coverage. The FSS is collected in December of each year by the Census Bureau on behalf of the U.S. Department of Agriculture and consists of about fifty thousand households (Coleman-Jensen et al. 2020). The FSS contains detailed information on food security and other food-related outcomes such as spending and participation in federal and nonfederal food assistance programs, and for this project the FSS data are used to provide trends in food insecurity.

A challenge foreshadowed earlier in this article is that there is no generally accepted definition of *working class* (Thiede, Lichter, and Sanders 2015). This is not unlike that confronting research on the middle class more generally, where *middle* is defined alternatively by “cash,” meaning some income range like the 30th–70th percentiles; “credentials,” such as a limited set of occupations or education levels; or “culture,” as defined by aspirations, norms, and values (Reeves, Guyot, and Krause 2018). Using an income range is the most prevalent way to delineate the middle class, but given the paucity of research on the working class, there is even less consensus on what a comparable income range would entail.

Instead, I adopt the credentials approach, focusing on households whose head, spouse, or primary individual has at most some college education but no college degree (Draut 2018; Powell 2018). The advantage of using restricted education attainment is that it covers most occupations associated with the working class, and it is a better proxy for household permanent income than is current income (Attanasio et al. 1991). A potential shortcoming is that by not using an explicit income cutoff, it does not rule out some potentially high-income earners. However, as will become apparent in the results, the vast majority of working-class households are of modest means and limited material well-being. In addition to limiting by education, the working-class household must have nonzero labor-market earnings, whether those earnings are of the head or some other

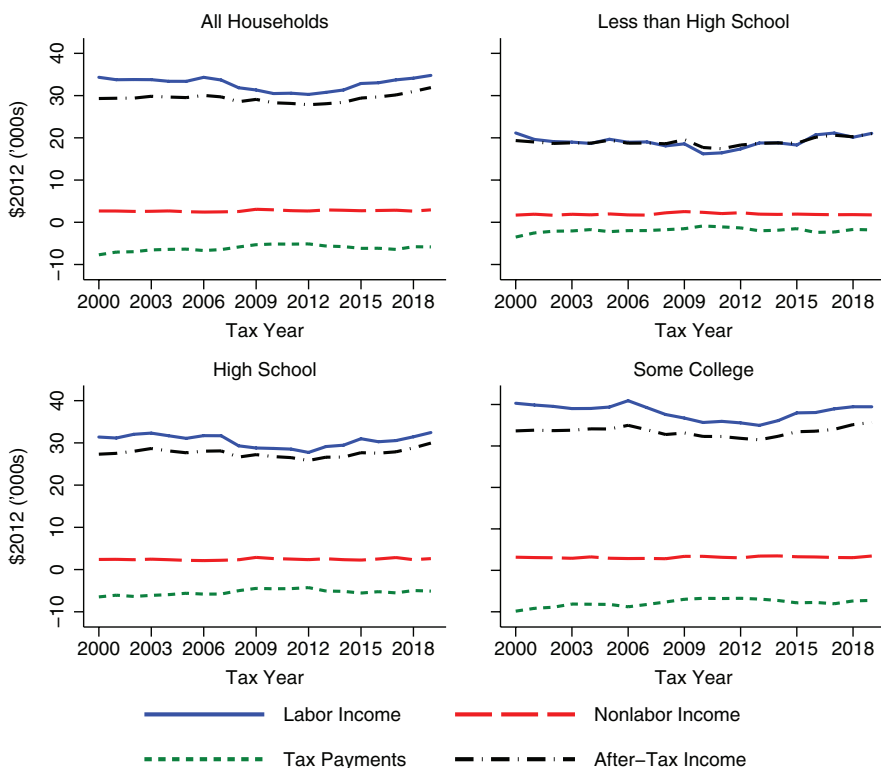
member of the household. Moreover, to focus on household adults whose formal schooling is most likely completed, but also before retirement decisions, the age of the head, spouse, or primary individual must be at least 25 and no more than 54. Within the sample of prime-age working households with less than a college education, I also examine heterogeneity in outcomes by level of education and, for some outcomes, by race (white or Black) or Hispanic ethnicity (of any race). The online appendix provides further details on sample selection and variable construction, along with summary statistics.

Composition, Distribution, and Growth of Incomes

I begin by documenting the level, composition, distribution, and growth of after-tax and transfer incomes of working-class households over the last 20 years. After-tax income is constructed as the sum of labor income and nonlabor income, less net tax payments inclusive of refundable tax credits. Labor income includes earnings from all jobs and all household members. Because the measure includes net self-employment income, it is possible for earnings to be negative. Nonlabor income includes the major forms of means-tested cash assistance, such as Temporary Assistance for Needy Families (TANF) and Supplemental Security Income (SSI); social insurance such as Social Security; Unemployment Insurance (UI), and Disability Insurance (DI); and private pension and interest incomes; and is inclusive of near-cash food assistance from the Supplemental Nutrition Assistance Program (SNAP). Tax payments include federal, state, and payroll (employee share of Social Security and Medicare) liabilities. Taxes are inclusive of refundable federal and state credits from the Earned Income Tax Credit (EITC) and Child Tax Credit (CTC) and, thus, may be negative. To account for differences in household size and composition, I equivalize each category using the modified Organisation for Economic Co-operation and Development (OECD) scale as described in the online appendix. Incomes are placed in real terms using the Personal Consumption Expenditure Deflator with 2012 base year.

Figure 1 depicts the average level and composition of inflation-adjusted after-tax incomes among the working class overall, and by the maximum education attainment of the household head, spouse, or primary individual. For the first 15 years of the sample period, average equivalized real after-tax incomes were roughly constant at just under \$30,000 per year; but starting in 2015, average after-tax incomes started to grow, albeit modestly. This came from a combination of higher earnings and tax cuts as nonlabor income was stable at a low level. Earnings bottomed out in 2012, but then increased by 15 percent to just under \$35,000 in 2019. Average tax payments increased along with earnings after 2012, but then fell about \$500 after the 2017 tax cut, giving an additional lift to net incomes. These same basic patterns hold across the skill distribution as demonstrated in the other three panels of Figure 1. The bright spot in the figure is the robust 30 percent increase in average earnings after 2010 from just over \$16,000 to \$21,000 among households headed by a high school dropout. The tax relief from the EITC and CTC are clearly in evidence for the less skilled, but the credits

FIGURE 1
Components of After-Tax and Transfer Income

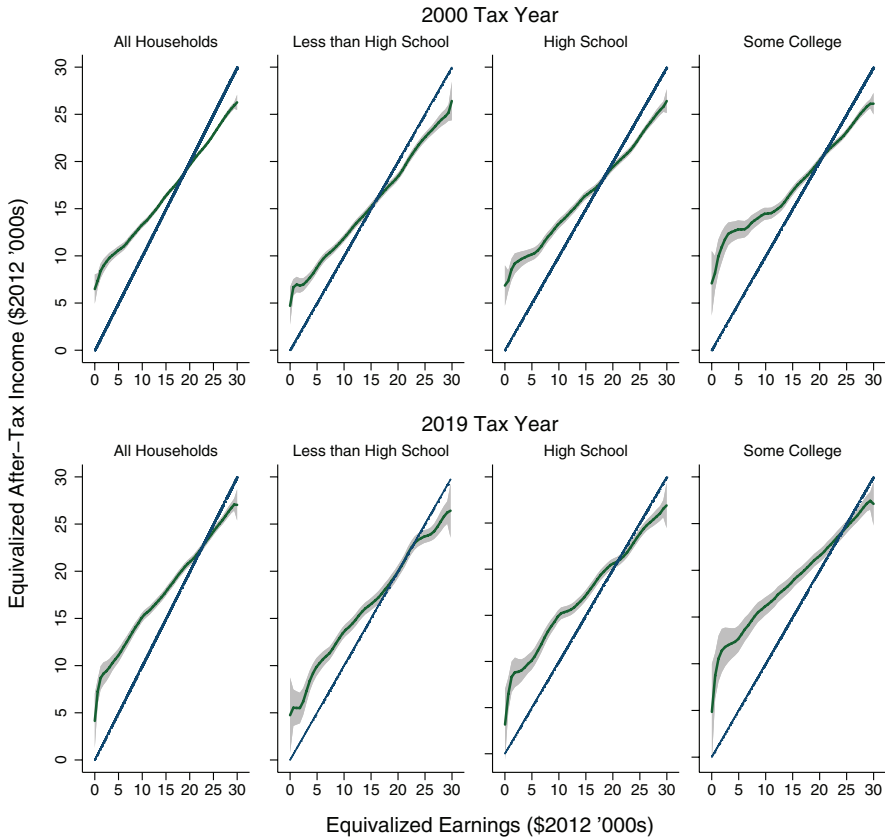


SOURCE: Author's calculations of data from survey years 2001 to 2020 of the CPS Annual Social and Economic Supplement.

are not generous enough to wipe out all tax liability for the typical low-skilled working-class household as positive tax payments average about \$2,000 per year for this group. The semiskilled group of some college households actually suffered the largest earnings loss from the Great Recession, falling \$5,000 in equivalized real dollars from 2000 to 2012, and by 2019 still had not made up all of that loss.

Figure 2 offers a closer look at the link between earnings and after-tax incomes in the 2000 and 2019 tax years. The figure plots a local polynomial regression of equivalized after-tax incomes on equivalized earnings, along with a 95 percent confidence interval in the shaded area, zeroing in on the left tail of the distribution with equivalized earnings and incomes under \$30,000 in real 2012 dollars.¹ The figure includes a 45-degree line, and thus after-tax incomes above the 45-degree line reflect refundable credits, while those values below imply positive tax liability that outweighs any credits. In 2000, after-tax incomes lie above the 45-degree line for households with earnings under \$20,000, and in 2019 this increases to about \$23,000. The rightward shift reflects both changes in earnings

FIGURE 2
 Relationship between Earnings and After-Tax Income

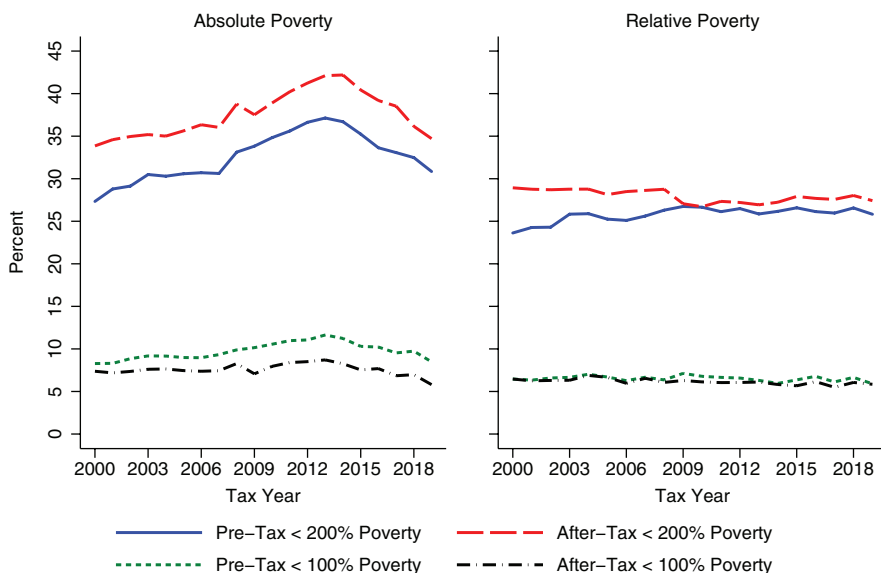


SOURCE: Author’s calculations of data from survey years 2001 to 2020 of the CPS Annual Social and Economic Supplement.

among the least skilled along with the expansions of the EITC and CTC in 2009 as part of the American Recovery and Reinvestment Act. At each level of equivalized earnings to the left of the breakeven point, after-tax incomes are higher as one moves up the skill distribution, reflecting differences in earnings, nonlabor incomes, and family composition. The less skilled somewhat narrowed that gap with households with high school or some college by 2019 with the strong earnings growth as discussed below.

I move beyond average incomes to explore changes in various metrics of the distribution of income among the working class. Figure 3 presents trends in absolute and relative poverty and near-poverty rates. The absolute poverty rate is defined as the fraction of households with incomes below the household-size specific Orshansky threshold used in official Census poverty statistics, while the near-poverty rate is the fraction of households with incomes below two times the

FIGURE 3
Trends in Absolute and Relative Poverty Rates before and after Taxes



SOURCE: Author's calculations of data from survey years 2001 to 2020 of the CPS Annual Social and Economic Supplement.

poverty line. As described in the online appendix, the relative poverty line is set at 60 percent of the median equivalized after-tax and transfer income, which is standard in several OECD nations (Joyce and Ziliak 2020), and the corresponding poverty (near-poverty) rates are defined as the share of households below the relative poverty line (twice the line). Poverty rates are depicted both before taxes and after taxes, where before-tax income includes all labor and nonlabor income inclusive of SNAP.

The left panel of Figure 3 shows the absolute poverty rates among all working-class households. The share of households with before-tax incomes below the federal poverty line increased 41 percent from 8.3 percent in 2000 to 11.7 percent in 2013 in the wake of the Great Recession, only to fall all the way back to 8.5 percent by 2019. Over that same period, after-tax poverty rates increased a more modest 18 percent from 7.4 percent to 8.7 percent, and then fell dramatically to 5.8 percent by 2019.² A different story emerges when looking at the share of households with incomes below twice the poverty line. In every year, after-tax near poverty rates exceeded before-tax near poverty rates by at least 5 percentage points, and both measures remained higher in 2019 than in 2000. The reversal of after-tax and before-tax poverty rates when we double the threshold stems from the fact that many households no longer qualify for the EITC or SNAP, or only qualify for a small credit or benefit, and thus sizable tax liabilities result in higher after-tax poverty among the near poor. The role of refundable credits is

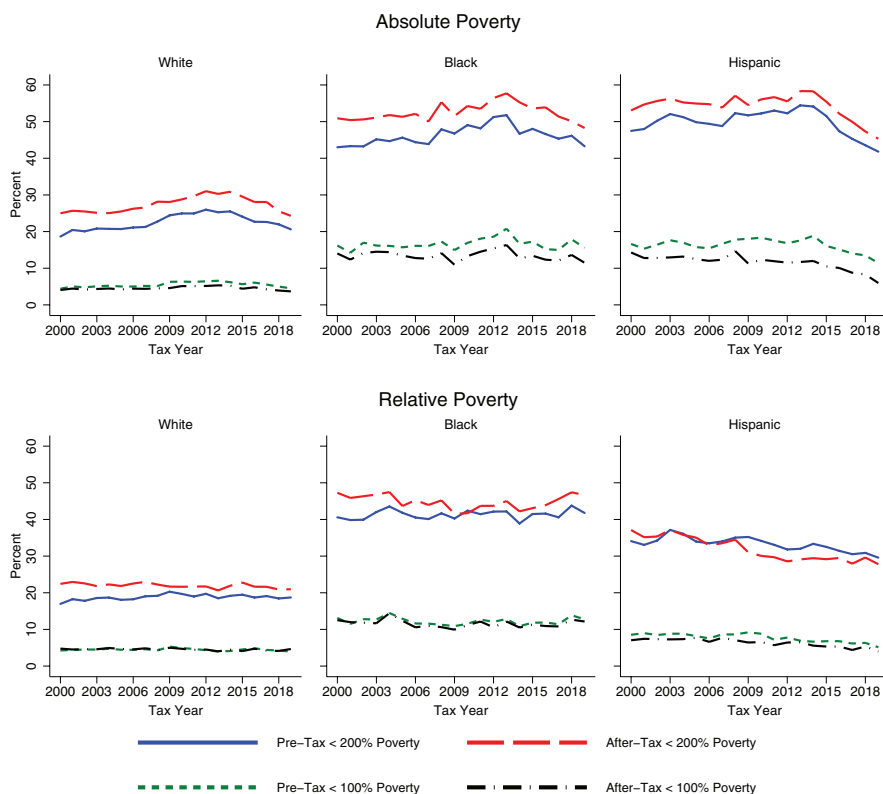
underscored further when comparing the increase in poverty rates among the near poor to the poor from 2000 to 2013—after-tax near-poverty rates increased 24 percent, or 6 percentage points more than after-tax rates below the poverty line.

The right panel of Figure 3 shows trends in relative poverty rates before and after taxes. There are two notable differences compared to the absolute poverty rates. First, the relative rates are constant with no business-cycle sensitivity over the Great Recession, much like we saw for average incomes in Figure 1. This is due largely to the fact that the relative poverty line falls during the recession and, thus, the sensitivity shows up in the threshold rather than the rate (see online appendix Figure A1). Second, there is no difference in before- and after-tax relative poverty rates and a much more attenuated difference in these rates at twice the relative poverty line. The latter likely results because the equalized relative poverty line lies below the average absolute poverty line, and thus we are still capturing some of the redistributive effect of the EITC and CTC in the after-tax measure of near relative poverty.

Figure 4 repeats the analysis, except now disaggregated by the race or ethnicity of the household head. The top row depicts absolute poverty and near-poverty rates for white, Black, and Hispanic households, while the bottom row presents relative rates. The figure shows that in a typical year leading up to and through the Great Recession, the before- and after-tax poverty rate among Black and Hispanic households is three times higher than among white households, and rates of near poverty are twice as high. However, poverty rates among white households increased faster than Black and Hispanic households over that same period. After 2013, however, poverty rates among Hispanic households fell rapidly such that by 2019 Hispanic poverty rates were several percentage points lower than among Black households. The bottom panel of Figure 4 shows that relative poverty rates of white and Black households were fairly stable over the whole period, whereas relative poverty has been on the decline among Hispanic households since the peak of the Great Recession; and indeed, by 2019, the after-tax relative poverty rate among Hispanics was actually lower than among white households (4.0 versus 4.7 percent), which suggests substantial gains against poverty among the Hispanic working class.

Figures 5 and 6 offer an alternative view of the income distribution by showing trends in upper-tail and lower-tail earnings and after-tax income inequality overall (Figure 5) and by race (Figure 6). The measure of upper-tail inequality is the ratio of the 90th to 50th percentiles, and the measure of lower-tail inequality is the ratio of the 50th to the 10th percentile. In Figure 5, we see a strong redistributive role for the tax and transfer system at the lower tail of the distribution, with the 50–10 after-tax income ratio at least one-third lower than the 50–10 earnings ratio in a typical year. The comparable percent reduction at the upper tail is about half that. The tax system is effective at mitigating inequality at both upper and lower tails, but the cash and near-cash assistance programs also play a role at the lower tail. With the exception of the years surrounding the Great Recession, both the 10th and 90th percentiles gained relative to the median between the start and end of the sample period, consistent with the “hollowing

FIGURE 4
Trends in Absolute and Relative Poverty Rates by Race and Ethnicity

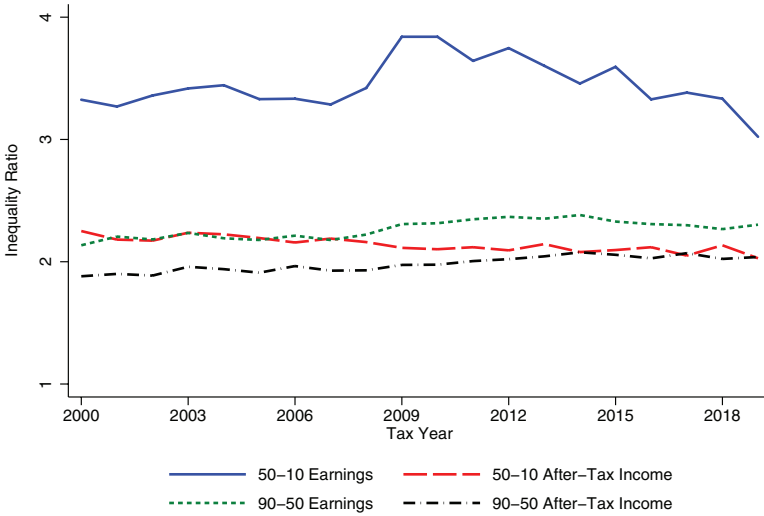


SOURCE: Author's calculations of data from survey years 2001 to 2020 of the CPS Annual Social and Economic Supplement.

out” of the middle in the labor force overall (Autor, Katz, and Kearney 2008). Figure 6 shows that 50–10 earnings inequality among Black households is considerably higher and noisier than among white and Hispanic households, which stems from greater variability at the 10th percentile. However, the tax and transfer system creates near parity among white and Black working-class households at 50–10 after-tax income inequality, with Hispanics slightly lower than both other groups. In addition, there is little racial or ethnic difference in 90–50 after-tax inequality.

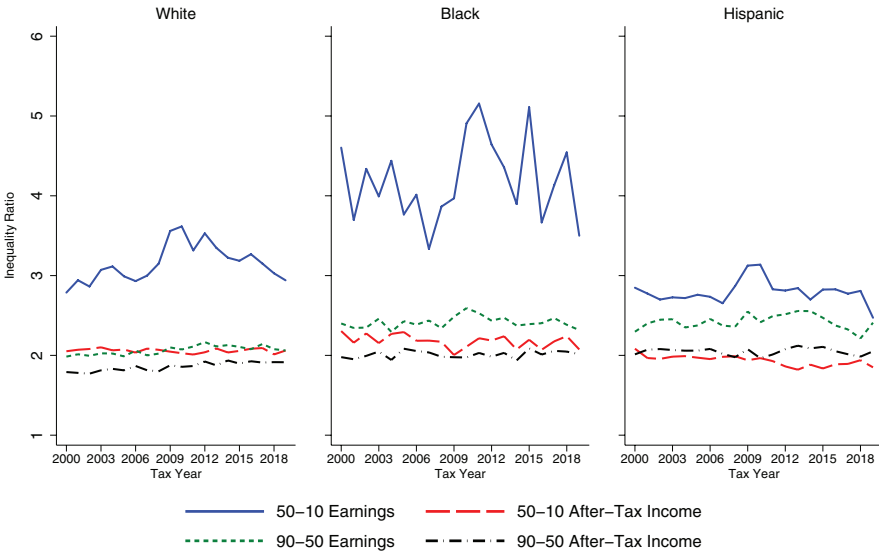
Figure 7 provides a more comprehensive look at the trends underlying incomes and inequality that I depicted in Figures 1 and 4, by showing the growth in earnings and after-tax incomes across the entire income distribution for all working-class households and within each skill group.³ Each panel shows growth over the whole sample period, and to capture the effects of the business cycle, from the peak-to-peak years 2000 to 2007 and 2007 to 2019. The first row shows

FIGURE 5
Trends in Earnings and After-Tax Income Inequality



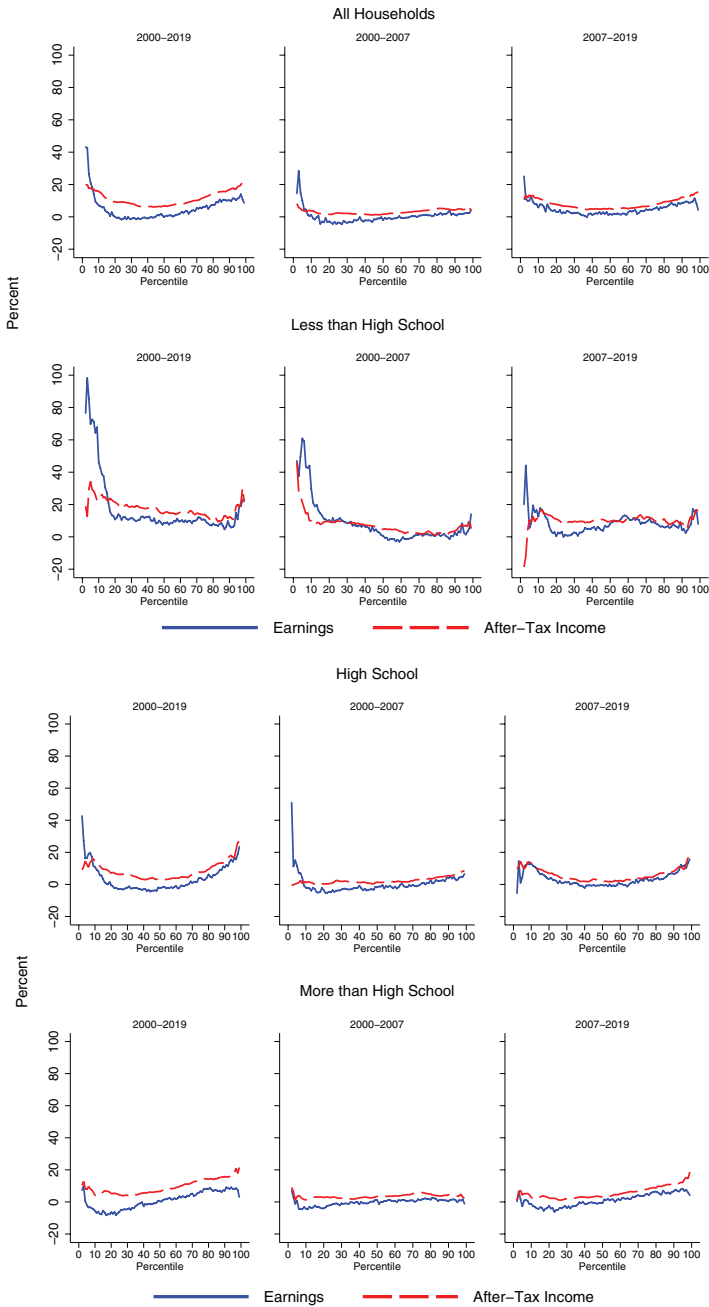
SOURCE: Author's calculations of data from survey years 2001 to 2020 of the CPS Annual Social and Economic Supplement.

FIGURE 6
Trends in Earnings and After-Tax Income Inequality by Race and Ethnicity



SOURCE: Author's calculations of data from survey years 2001 to 2020 of the CPS Annual Social and Economic Supplement.

FIGURE 7
Earnings and After-Tax Income Growth before and after the Great Recession



SOURCE: Author's calculations of data from survey years 2001 to 2020 of the CPS Annual Social and Economic Supplement.

that among all working-class households, earnings growth from 2000 to 2019 was strongest in the lowest percentiles; but from the 15th to 75th percentiles, earnings growth was effectively zero, and then only modest thereafter (and actually falling in the upper few percentiles). Growth in after-tax incomes was stronger across the distribution, taking a slight U-shape with growth highest in the tails. The middle and far right panels in the first row show that there is little difference in earnings and after-tax income growth across the peaks of the business cycles. The Great Recession clearly had a deleterious effect on labor incomes for the working class in the bottom of the earnings distribution, but they recovered those losses the ensuing decade. After-tax income showed more stability, highlighting the automatic stabilizing role of the tax and transfer system (Kniesner and Ziliak 2002a, 2020b; Blundell, Pistaferri, and Preston 2008).

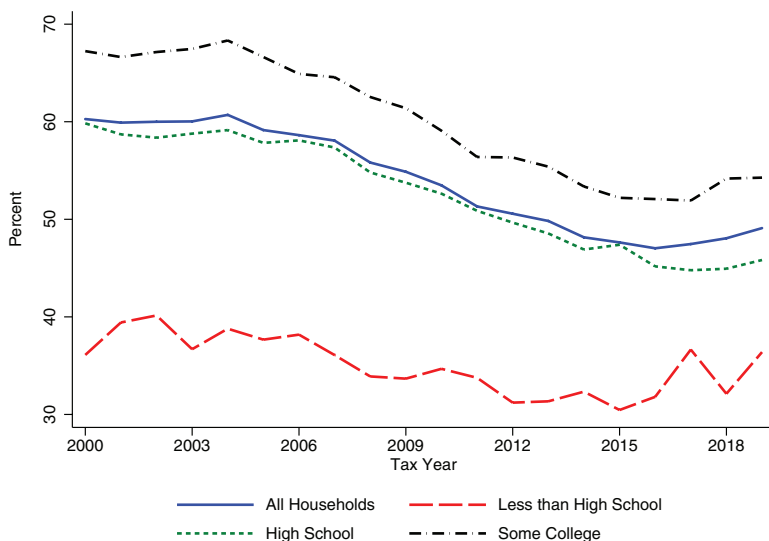
The next three rows of Figure 7 depict earnings and after-tax income growth by education attainment. Among the least skilled, earnings grew very rapidly for the bottom 15 percentiles and at a modest rate of 10 percent for most percentiles thereafter. The slow growth above the 15th percentile was due to labor-market weakness leading up to and in the years immediately after the Great Recession, and then a very strong recovery after 2014. After-tax incomes for the less skilled clocked in at about 20 percent over most of the distribution from 2000 to 2019, with stronger performance in the top 10 percent. With the exception of the bottom 10 percent, growth in after-tax income was positive in both subperiods, and thus the total effect is additive. The next two rows with high school graduates and those with some college show slower growth in earnings across the distribution, and the same holds for after-tax incomes below the 90th percentile, with growth in the top 10 percentiles among the higher skilled groups comparable to the less skilled. This tepid growth helps to explain the stagnant average incomes depicted in Figure 1. Appendix Figure A2 explores whether the earnings growth patterns in Figure 7 are driven by changes in hourly wages.⁴ Wage growth over much of the distribution is stronger than earnings growth, except for the lower and upper tails, suggesting that the weaker earnings growth in the middle of the distribution comes from downward adjustments in annual hours worked.

Based on the standard measures of liquidity—earnings and after-tax incomes—the last two decades have been marked by steep increases in poverty and earnings inequality, followed by an even stronger retrenchment because of strong earnings growth in the lower tail, especially after 2014. Households headed by a Hispanic person have been particular beneficiaries of the robust growth in the last half decade before the onset of the COVID-19 pandemic. In the next section, I expand the analysis beyond income to examine additional measures of well-being.

Material Well-Being of the Working Class

Owning a home is a major source of wealth for American families, accounting for at least one-half of net worth for the average household and even more for those

FIGURE 8
Trends in Homeownership

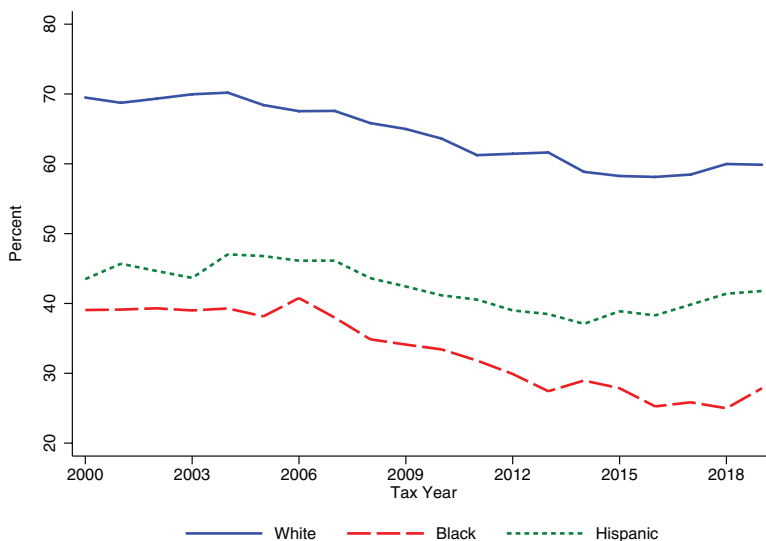


SOURCE: Author's calculations of data from survey years 2001 to 2020 of the CPS Annual Social and Economic Supplement.

in the lower half of the income distribution (Bhutta et al. 2020). Figure 8 presents trends on whether the household owns their home. The figure shows that 60 percent of working-class households owned their homes in 2000, about 7 percentage points lower than the overall U.S. average (U.S. Census Bureau 2021). This share plummeted after 2004, falling 13 percentage points by 2014, before recovering slightly to 49 percent in 2019.⁵ This is in contrast to the 64.5 percent homeownership rate among all households in the nation, suggesting that the working class disproportionately lost ground over this period in terms of access to housing wealth. Figure 8 indicates that this decline in ownership cut across all skill groups of the working class but was particularly pronounced among those households with high school or some college.

A long-standing concern affecting upward mobility of Black families compared to white families is the gap in wealth across races (Blau and Graham 1990; Altonji and Doraszelski 2005; Aliprantis, Carroll, and Young 2019; Addo and Darity 2021). Figure 9 explores homeownership rates by race and ethnicity. The figure shows that there is a yawning racial gap in homeownership—in 2000, only 39 percent of Black working-class households owned their homes compared to 69 percent of white working-class households. By 2019, this massive gap in homeownership actually widened, with Black homeownership rates plummeting to 28 percent compared to 60 percent among white households. Hispanic households, on the contrary, demonstrated greater resilience over the last two decades in terms of homeownership. In particular, the strong recovery after 2014 lifted rates

FIGURE 9
Trends in Homeownership by Race and Ethnicity



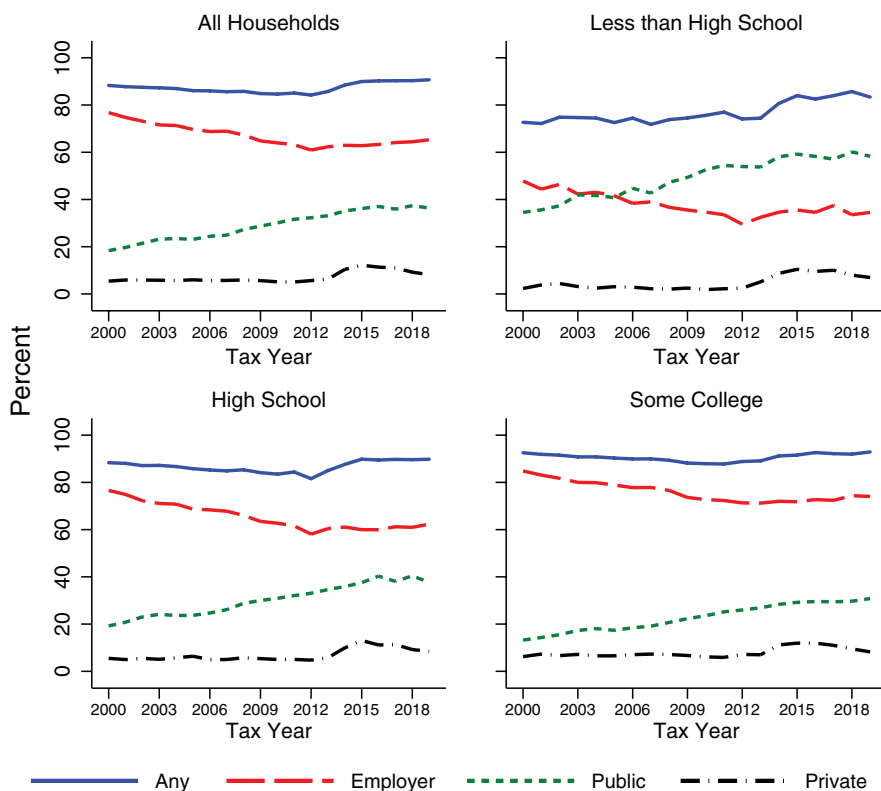
SOURCE: Author’s calculations of data from survey years 2001 to 2020 of the CPS Annual Social and Economic Supplement.

to levels on par with those in 2000, and as a consequence there was convergence between white and Hispanic household homeownership, leaving Black households further behind.

The financial crisis at the heart of the Great Recession hit the housing sector particularly hard, but the brunt of the crisis was borne by semiskilled and less-skilled households that have not rebounded, pointing to widening of wealth inequality (Saez and Zucman 2020; Pew Research Center 2020). Black households were particularly susceptible to these deleveraging trends (Dynan 2012; Wolff 2017). A recent analysis by Choi et al. (2019) examined homeownership rates across metropolitan areas, finding that 80 percent of the Black-white racial gap in homeownership can be explained by three factors—income shortfalls, lower rates of marriage, and lower credit scores—among Black households compared to white households. While suggestive, these three factors are all interrelated, and further research at the household level is needed to unpack the underlying persistent racial gaps in homeownership.

The United States is unique among developed countries in the OECD in not providing universal access to health insurance, historically relying instead on employer-provided health care coverage among the nonaged (Field and Shapiro 1993). Health insurance per se does not guarantee access to quality care, or any care, but implicitly provides protection against financial losses and thus frees up the household budget for other valued uses.⁶ Figure 10 presents trends in health insurance coverage by source of coverage—employer, public, or private

FIGURE 10
Trends in Health Insurance Coverage

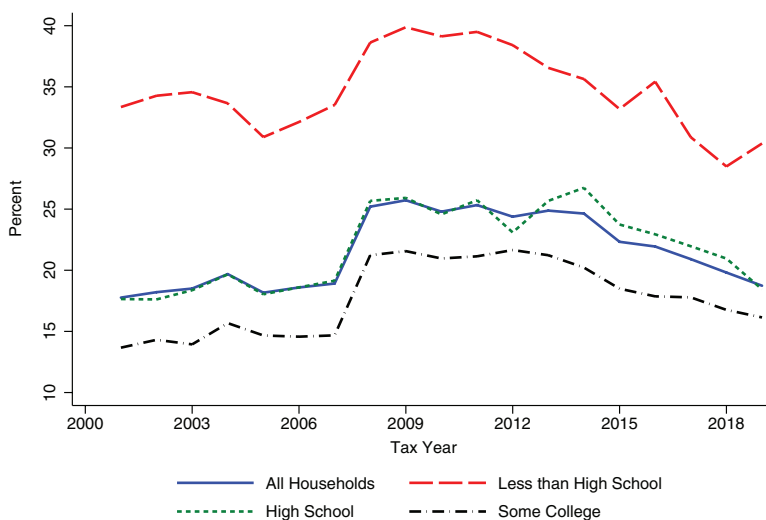


SOURCE: Author's calculations of data from survey years 2001 to 2020 of the CPS Annual Social and Economic Supplement.

purchase—along with trends in any coverage. It is possible for households to have more than one source of coverage, and thus the percentages of employer, public, and private sum to more than 100 percent.

Figure 10 shows that among all working-class households, coverage from any health insurance was relatively stable between 85 and 88 percent from 2000 to 2013, but that was because declines in employer coverage were offset by increases in public insurance. In 2000, 77 percent of households had employer-provided coverage, but this fell to 62 percent in 2013. Over that same period, public health insurance nearly doubled from 18 percent to 33 percent, making up for much of the loss of employer coverage. The ACA was passed in 2010 and implemented in 2014; among other provisions, it expanded coverage to adult children up to age 26, subsidized purchases of private coverage, and at states' discretion expanded Medicaid to nondisabled, nonelderly adults. As a consequence, public coverage expanded another 3 to 4 percentage points; private

FIGURE 11
Trends in Household Food Insecurity



SOURCE: Author’s calculations of data from survey years 2001 to 2019 of the CPS Food Security Supplement.

coverage increased from around 6 percent to 9 percent (after initially doubling to 12 percent); and because there was a rebound in employer coverage as well, overall insurance coverage reached 91 percent by 2019. These same patterns held across all three skill groups of working-class households. The loss of employment insurance was especially acute among the lower skilled, falling nearly 20 percentage points for both the high school and less than high school groups, but public coverage grew 20 to 25 percentage points. When coupled with higher private coverage, rates of health insurance among high school dropout households increased from 73 percent to 83 percent between 2000 and 2019, a clear result of the ACA expansions. Appendix Figure A3, which depicts insurance coverage rates by race and ethnicity, shows that Black and Hispanic households gained from the ACA more than white households, and thus nearly closed the racial gap in insurance coverage.

The final metric of household well-being that I consider here is food insecurity, which is a household-level economic and social condition of limited access to food. The reasons for food insecurity extend well beyond poverty to also include low assets, low human capital, low physical and mental functioning, among others (Gundersen, Kreider, and Pepper 2011). Food insecurity is associated with numerous negative health outcomes across the age gradient and, as such, is one of the leading public health threats in the United States (Gundersen and Ziliak 2015). Since 1995 the U.S. Department of Agriculture (USDA) has sponsored the FSS, fielding the supplement in December of each year starting in 2001. The

measure consists of eighteen questions for households with children and a subset of ten of these for households without children, with each condition owing to financial constraints. I adopt the official USDA designation of food insecurity as a household responding in the affirmative to at least three of the questions, and to keep interview month constant, I start the series in 2001 instead of 2000 as in the ASEC figures.

Figure 11 depicts the trends in food insecurity among all working-class households, and by education attainment. Household food insecurity averaged just over 18 percent from 2001 to 2007, but then leapt over one-third with the onset of the Great Recession so that one in four working-class households were food insecure. This condition remained elevated for several years before falling back in 2015 and nearly reaching pre-Recession levels by 2019. The figure shows that there is a strong gradient of food insecurity risk across education levels, with rates among high school dropouts double those among households with some college. However, all households experienced the food security shock associated with the Great Recession. Interestingly, the least skilled started recovering from that shock before the two higher-skilled groups and was the only category to have food insecurity rates in 2019 lower than in 2001, albeit at the high level of 30 percent. Appendix Figure A4 shows rates of food insecurity by race and ethnicity. We can see that food insecurity among Black and Hispanic households was nearly double that of white households in the early 2000s; and while all race and ethnic groups had substantial increases with the Great Recession, the recovery was earlier and swifter among minority households. This finding is especially pronounced among Hispanic households such that by 2019, their food insecurity rates had nearly converged with white households.

Discussion

The two decades leading up to the global COVID-19 pandemic of 2020 were a mixed bag for the working class in America. In the first half through the Great Recession, average earnings, homeownership, and insurance coverage all fell, while absolute poverty and food insecurity accelerated. After-tax incomes were stagnant for much of the distribution overall and within skill groups. But the economic hemorrhaging either abated or reversed in the decade after the Great Recession, especially for the least skilled. This change resulted from robust earnings growth, which resulted in falling lower-tail earnings inequality, absolute poverty, and food insecurity, coupled with increased insurance coverage and a modest rebound in after-tax incomes. The notable exception is that the decline in homeownership has persisted.

The gains made by the working class in recent years likely came to a screeching halt with the onset of the coronavirus pandemic, as the working class has been hit disproportionately hard by the current health crisis. The economic lockdown allowed households with flexible employment arrangements to work from home, but this arrangement excluded a large share of the working class who are more

likely to work in the service economy, resulting in a massive surge in unemployment and food hardships (Barrero, Bloom, and Davis 2020; Bitler, Hoynes, and Schanzenbach 2020; Moffitt and Ziliak 2020; Ziliak 2020). Congress responded to the pandemic with an extensive array of spending programs, including direct payments to individuals, extended Unemployment Insurance (UI) that also covered self-employed and gig-economy workers for the first time, and grants and loans to companies both large and small. Although official income statistics from the ASEC will not be released until fall 2021, simulation models suggest that the expanded UI left many workers whole in the first months of the crisis and prevented widespread poverty (Ganong, Noel, and Vavra 2020; Parolin and Wimer 2020). As many of these programs expired in July 2020, and were not renewed until late December, the extent that the well-being of the working class deteriorated with the pandemic, and its potential long-term consequences, is still unknown.

What we do know is that the Great Recession and COVID-19 pandemic exposed cracks in the U.S. social safety net that leave working-class households particularly vulnerable. With the historic reliance on employer-provided health insurance, working households displaced during economic downturns face the double jeopardy of lost insurance coverage. This exposure is especially acute when the source of the furlough is a health-related crisis, layered on top of other secular health crises such as the opioid epidemic (Case and Deaton 2015; Currie and Schwandt 2021). The ACA was a clear policy advance for low-income households, but as documented here, a large share of the least-advantaged households still remain uncovered. This finding suggests reforms aimed at expanding coverage under the ACA, such as a public option to buy in to Medicaid or Medicare, or a more progressive move toward a universal single-payer insurance plan akin to most OECD nations, would be a step forward to reduce financial and health exposure of working-class households.

Self-employed and gig-economy workers are generally not eligible for UI; nor are many part-time and seasonal workers. The current experience with the Pandemic Unemployment Insurance Program points to an important role that access to UI plays for this large and growing share of the working class during economic downturns. Future reforms of UI should include some form of permanent eligibility for this cornerstone automatic stabilizer. The surge in food insecurity during the Great Recession was partially mitigated by a temporary increase in SNAP benefits, and this is likely occurring in real time during the COVID crisis with the increased SNAP benefits available through the end of September 2021. However, the maximum SNAP benefit has always been too low, set at the lowest of the four USDA food plans; and given the persistence of food insecurity, reforms that increase SNAP maximums would go some way toward improving the food security status of households (Ziliak 2016).

Finally, the Great Recession set in motion a large retrenchment from homeownership among the working class that only slightly recovered by the end of the recent economic expansion. As the bedrock of household wealth, the decline in homeownership points toward widening wealth inequality; and because home equity is frequently used as a source of credit for other family investments such as children's education, falling homeownership may also reduce access to higher

education in coming years. This decline was particularly acute among Black working-class households, resulting in a widening racial wealth gap and likely reduced upward mobility in coming years. The lesson of the widespread financial ruin from housing during the Great Recession is that subprime lending programs must be eschewed in favor of lending programs with modest down payment requirements, and potentially backstopped by repayment plans tied to household incomes much like we see with federally backed student loans.

Notes

1. The local polynomial regression is based on a third-order polynomial of an Epanechnikov kernel using a bandwidth of \$2,000 equivalized income. The regression is unweighted. I restrict the sample to earnings and after-tax incomes greater than \$0 and less than or equal to \$30,000. The restriction to nonzero earnings implies I drop those with self-employment losses, which eases presentation.

2. As documented in Rothbaum and Bee (2020), there was a large increase in nonresponse to the March 2020 CPS, which was fielded just as the country was entering lockdown in response to the COVID-19 pandemic. They estimate that this rise in nonresponse attenuated poverty estimates for calendar year 2020. This increase in nonresponse continues a long trend in the CPS ASEC that has been shown to bias estimates of poverty and inequality downward (Hokayem, Bollinger, and Ziliak 2015; Bollinger et al. 2019). The after-tax poverty rate for working class families in 2018, which was measured before the sharp rise in nonresponse in 2020, was 6.9 percent and still lower than at the start of the sample period.

3. The figure reports estimates of the growth incidence curve, defined as
$$g_t(p) = 100\% * \left(\frac{y_t(p)}{y_{t-1}(p)} - 1 \right)$$
 where $y_t(p)$ is income at the p th percentile in time t , and $y_{t-1}(p)$ is income at the same percentile in time $t - 1$ (Ravallion and Chen 2003). I trim the 1st and 100th percentiles for presentation purposes as these tend to be outliers that distort the figures.

4. Average hourly earnings are computed by taking the ratio of equivalized household annual earnings by equivalized annual household hours of work. Thus, the wage reflects the average contribution of the equivalized adult and not of the household head. Appendix Figure A2 shows growth across the wage distribution, and not the earnings distribution as in Figure 7 of the main text. Graphing the average wage against the earnings percentile results in a much more noisy series, even after smoothing by taking a 5-percentile-point moving average.

5. The homeownership rate in the overall economy also peaked in 2004 at 69 percent (U.S. Census Bureau 2021, Table 4SA).

6. A widely cited statistic is that roughly two-thirds of all personal bankruptcies in the United States emanate from excess medical expenses (Himmelstein et al. 2009), although a recent study questioned this result, suggesting it is less than 10 percent (Dobkin et al. 2018). In a rejoinder, Himmelstein et al. (2019) present additional evidence supporting their original two-thirds estimate, further suggesting that underinsurance is more of a cause of bankruptcy than lack of insurance. Personal bankruptcy is an extreme outcome, and whether medical expenses are a leading cause or not, health insurance mitigates against financial loss, although many policies are limited in their coverage, leaving some families vulnerable.

References

- Abraham, Katharine G., and Melissa S. Kearney. 2020. Explaining the decline in the U.S. employment-to-population ratio: A review of the evidence. *Journal of Economic Literature* 58 (3): 585–643.
- Addo, Fenaba R., and William A. Darity. 2021. Wealth, race, and the working class from 2010–2019. *The ANNALS of the American Academy of Political and Social Science* (this volume).

- Aliprantis, Dionissi, Daniel Carroll, and Eric R. Young. 2019. The dynamics of the racial wealth gap. Federal Reserve Bank of Cleveland Working Paper 1918. Available from <https://clevelandfed.org/wp> (accessed 7 February 2021).
- Altonji, Joseph G., and Ulrich Doraszelski. 2005. The role of permanent income and demographics in Black/white differences in wealth. *Journal of Human Resources* 40 (1): 1–30.
- Attanasio, Orazio P., James Banks, Costas Meghir, and Guglielmo Weber. 1991. Humps and bumps in lifetime consumption. *Journal of Business and Economic Statistics* 17 (1): 22–35.
- Auten, Gerald, and David Splinter. 2019. Top 1% income shares: Comparing estimates using tax data. *AEA Papers and Proceedings* 109:307–11.
- Autor, David. 2014. Skills, education, and the rise of earnings inequality among the “other 99” percent. *Science* 344 (6186): 843–50.
- Autor, David H., Lawrence F. Katz, and Melissa S. Kearney. 2008. Trends in U.S. wage inequality: Revising the revisionists. *Review of Economics and Statistics* 90 (2): 300–323.
- Barrero, Jose M., Nicholas Bloom, and Steven J. Davis. 2020. Covid-19 is also a reallocation shock. Brookings Papers on Economic Activity. Washington, DC: Brookings Institute.
- Bhutta, Neil, Jesse Bricker, Andrew C. Chang, Lisa J. Dettling, Sarena Goodman, Joanne Hsu, Kevin Moore, Sarah Reber, Alice Henriques Volz, and Richard Windle. 2020. Changes in U.S. family finances from 2016 to 2019: Evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin* 106 (5): 1–42.
- Bitler, Marianne, Hilary W. Hoynes, and Diane Whitmore Schanzenbach. 2020. The social safety net in the wake of Covid-19. NBER Working Paper 27796, National Bureau of Economic Research, Cambridge, MA.
- Blau, Francine D., and John W. Graham. 1990. Black–white differences in wealth and asset composition. *Quarterly Journal of Economics* 105 (2): 321–39.
- Blundell, Richard, Robert Joyce, Agnes Norris Keiller, and James P. Ziliak. 2018. Income inequality and the labour market in Britain and the US. *Journal of Public Economics* 162:48–62.
- Blundell, Richard, Luigi Pistaferri, and Ian Preston. 2008. Consumption inequality and partial insurance. *American Economic Review* 98 (5): 1887–1921.
- Bollinger, Christopher R., Barry Hirsch, Charles Hokayem, and James P. Ziliak. 2019. Trouble in the tails? What we know about earnings nonresponse thirty years after Lillard, Smith, and Welch. *Journal of Political Economy* 127 (5): 2143–85.
- Burtless, Gary, and Tracy Gordon. 2011. The federal stimulus programs and their effects. In *The Great Recession*, eds. David B. Grusky, Bruce Western, and Christopher Wimer, 249–93. New York, NY: Russell Sage Foundation.
- Case, Anne, and Angus Deaton. 2015. Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. *Proceedings of the National Academy of Sciences* 112 (49): 15078–83.
- Chetty, Raj, David Grusky, Maximillian Hell, Nathaniel Hendren, Robert Manduca, and Jimmy Narang. 2017. The fading American dream: Trends in absolute income mobility since 1940. *Science* 356 (6336): 398–406.
- Choi, Jung Hyun, Alanna McCargo, Michael Neal, Laurie Goodman, and Caitlin Young. 2019. Explaining the Black-white homeownership gap. Available from www.urban.org (accessed 7 February 2021).
- Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, and Anita Singh. 2020. Household food security in the United States in 2019. Economic Research Report Number 275. Washington, DC: United States Department of Agriculture.
- Currie, Janet, and Hannes Schwandt. 2021. The opioid epidemic was not caused by economic distress but by factors that could be more rapidly addressed. *The ANNALS of the American Academy of Political and Social Science* (this volume).
- Dobkin, Carlos, Amy Finkelstein, Raymond Kluender, and Matthew J. Notowidigdo. 2018. Myth and measurement: The case of medical bankruptcies. *New England Journal of Medicine* 378 (12): 1076–78.
- Draut, Tamara. 2018. Understanding the working class. Available from www.demos.org (accessed 26 January 2020).
- Dynan, Karen. 2012. Is a household debt overhang holding back consumption? *Brookings Papers on Economic Activity*, Spring: 299–344.
- Ehrenreich, Barbara. 2001. *Nickel and dimed: On (not) getting by in America*. New York, NY: Henry Holt.

- Field, Marilyn J., and Harold T. Shapiro, eds. 1993. *Employment and health benefits: A connection at risk*. Institute of Medicine, Committee on Employer-Based Health Benefits. Washington, DC: National Academies Press.
- Ganong, Peter, Pascal Noel, and Joseph Vavra. 2020. US unemployment replacement rates during the pandemic. NBER Working Paper 27216, National Bureau of Economic Research, Cambridge, MA.
- Gundersen, Craig, Brent Kreider, and John Pepper. 2011. The economics of food insecurity in the United States. *Applied Economic Perspectives and Policy* 33 (3): 281–303.
- Gundersen, Craig, and James P. Ziliak. 2015. Food insecurity and health outcomes. *Health Affairs* 34 (11): 1830–39.
- Himmelstein, David U., Robert M. Lawless, Deborah Thorne, Pamel Foohey, and Steffie Woolhandler. 2019. Medical bankruptcy: Still common despite the Affordable Care Act. *American Journal of Public Health* 109 (3): 431–33.
- Himmelstein, David U., Deborah Thorne, Elizabeth Warren, and Steffie Woolhandler. 2009. Medical bankruptcy in the United States, 2007: Results of a national study. *American Journal of Medicine* 122 (8): 741–46.
- Hokayem, Charles, Christopher Bollinger, and James P. Ziliak. 2015. The role of CPS nonresponse in the measurement of poverty. *Journal of the American Statistical Association* 110 (511): 935–45.
- Joyce, Robert, and James P. Ziliak. 2020. Relative poverty in Great Britain and the United States, 1979–2017. *Fiscal Studies* 40 (4): 485–518.
- Kniesner, Thomas J., and James P. Ziliak. 2002a. Explicit versus implicit income insurance. *Journal of Risk and Uncertainty* 25 (1): 5–20.
- Kniesner, Thomas J., and James P. Ziliak. 2002b. Tax reform and automatic stabilization. *American Economic Review* 92 (3): 590–612.
- Larrimore, Jeff, Richard V. Burkhauser, and Philip Armour. 2015. Accounting for income changes over the Great Recession relative to previous recessions: The impact of taxes and transfers. *National Tax Journal* 68 (2): 281–318.
- Moffitt, Robert A. 2013. The Great Recession and the social safety net. *The ANNALS of the American Academy of Political and Social Science* 650:143–66.
- Moffitt, Robert A., and James P. Ziliak. 2020. Covid-19 and the U.S. safety net. *Fiscal Studies* 41 (3): 515–48.
- Parolin, Zachary, and Christopher Wimer. 2020. Forecasting estimates of poverty during the covid-19 crisis. Poverty and Social Policy Brief 2046, Center on Poverty and Social Policy, Columbia University, New York, NY.
- Pew Research Center. 2020. Most Americans say there is too much economic inequality in the U.S., but few than half call it a top priority. Washington, DC. Available from www.pewsocialtrends.org (accessed 24 November 2020).
- Powell, Adam. 2018. Who makes up the working class? A state-by-state look at America's diverse working class. Available from www.americanprogressaction.org (accessed 26 January 2020).
- Ravallion, Martin, and Shaohua Chen. 2003. Measuring pro-poor growth. *Economics Letters* 78:93–99.
- Reeves, Richard V., Katherine Guyot, and Eleanor Krause. 2018. *Defining the middle class: Cash, credentials, or culture?* Washington, DC: The Brookings Institution. Available from www.brookings.edu (accessed 17 November 2020).
- Rose, Stephen. 2020. *Squeezing the middle class: Income trajectories from 1967 to 2016*. Washington, DC: The Brookings Institution. Available from www.brookings.edu (accessed 21 August 2020).
- Rothbaum, Jonathan, and Adam Bee. 2020. Coronavirus infects survey, too: Nonresponse bias during the pandemic in the CPS ASEC. SEHSD Working Paper Number 2020-10, U.S. Census Bureau, Suitland, MD.
- Saez, Emmanuel, and Gabriel Zucman. 2020. The rise of income and wealth inequality in America: Evidence from distributional macroeconomic accounts. *Journal of Economic Perspectives* 34 (4): 3–26.
- Semega, Jessica, Melissa Kollar, Emily Shrider, and John Creamer. 2020. Income and poverty in the United States: 2019. Report Number P60-270. Washington, DC: U.S. Census Bureau.
- Shambaugh, Jay, and Michael Strain. 2021. The recovery from the great recession: A long, evolving expansion. *The ANNALS of the American Academy of Political and Social Science* (this volume).
- Shipler, David K. 2005. *The working poor: Invisible in America*. New York, NY: Vintage Books.

- Strain, Michael R. 2020. *The American dream is not dead (but populism could kill it)*. West Conshohocken, PA: Templeton Press.
- Terkel, Studs. 1974. *Working: People talk about what they do all day and how they feel about what they do*. New York, NY: Pantheon/Random House.
- Thiede, Brian, Daniel Lichter, and Scott Sanders. 2015. America's working poor: Conceptualization, measurement, and new estimates. *Work and Occupations* 42 (3): 267–312.
- U.S. Census Bureau. 2021. Quarterly residential vacancies and homeownership. Release Number: CB21-15. Available from www.census.gov (Accessed 7 February 2021).
- Wimer, Christopher, Zachary Parolin, Anny Fenton, Liana Fox, and Christopher Jencks. 2020. The direct effect of taxes and transfers on changes in the U.S. income distribution, 1967–2015. *Demography* 57:1833–51.
- Wolff, Edward. 2017. Household wealth trends in the United States: Has middle class wealth recovered? NBER Working Paper 24085, National Bureau of Economic Research, Cambridge, MA. Available from www.nber.org (accessed 7 February 2021).
- Ziliak, James P. 2016. *Modernizing SNAP benefits. The Hamilton Project Policy Proposal 2016–2006*. Washington, DC: The Brookings Institution. Available from www.brookings.edu (accessed 22 November 2020).
- Ziliak, James P. 2020. Food hardship during the covid-19 pandemic and Great Recession. *Applied Economic Perspectives and Policy*. Available from <https://doi.org/10.1002/aep.13099>.