RECESSION REMEDIES

Lessons Learned from the U.S. Economic Policy Response to COVID-19



Edited by

Wendy Edelberg, Louise Sheiner, and David Wessel

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BROOKINGS

CHAPTER 7

Lessons Learned from the COVID-19 Policy Response and Child Well-Being

Anna Aizer and Claudia Persico¹

N egative shocks during childhood can have outsized effects because they interrupt a child's healthy growth and development (Almond, Currie, and Duque 2018); even transitory events in childhood have been shown to have long-term consequences. With a growing portion of children's lives spent during the COVID-19 recession and recovery, the pandemic may end up affecting the lives of children the most.

Some negative shocks experienced by children were specific to the pandemic and may not recur in the next recession, including the closing of schools and child-care facilities and the loss of parents, family, and other caregivers. These shocks increased stress and affected the social and emotional well-being of students and adult caregivers. Lake and Gross (2021) find that 30 to 40 percent of young people ages 13 to 19 have likely experienced negative impacts to their mental health as a result of the pandemic. Rates of anxiety and suicide attempts increased among students. The negative effects were most pronounced for students who learned remotely for long periods of time, girls, and students from historically marginalized groups. Lake and Gross further find that the negative effects of the pandemic increased over time and that student supports were often inadequate.

Other negative shocks—loss of household income, food insecurity, disruptions in health insurance or child care, and reductions in school spending—are common across recessions. A large body of research links income, health insurance, food security, access to high quality child care, and school spending to child health and school achievement outcomes. While researchers will not know the full impact of the pandemic and the policy response on child outcomes

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for many years, existing research on the impact of negative shocks to children and evidence on the short-term impact of various policies enacted during the pandemic allow for reasonable projections and policy lessons for protecting children from the consequences of a more typical downturn.

Pandemic-specific shocks to healthy child development, such as the closing of schools, COVID-related disability and the loss of family members, will have negative impacts on children's well-being but are not the focus of this chapter. Our main objective is to provide lessons to policymakers who seek to lessen the negative impact of the next recession on children and families. In what follows, we focus on the following policy domains: income, education, child care, health insurance, and food and nutrition.

Income

The decline in earned income at the beginning of the pandemic was unprecedented. The employment rate among all individuals 16 and older fell from 60 to 52 percent in April 2020; between late March and June, over 50 million claims were filed for unemployment insurance (Han, Meyer, and Sullivan 2020). While employment has since increased, as of January 2022, it remained slightly below pre-pandemic levels (Bureau of Labor Statistics 2022). Some portion of this job loss may not be cyclical, and likely reflects school and child-care facilities closures (see Box 7.1).

Parental job loss leads to temporary declines in family income, but for some, the loss of income persists (Oreopolous et al. 2005). Parental income has been shown to have a causal impact on child health and educational attainment (Case et al. 2002; Akee et al. 2010; Aizer et al. 2016; Hoynes, Schanzenbach, and Almond 2016). This has long-term consequences: parental job loss and the accompanying decline in family income during childhood have been linked with significant reductions in offspring earnings in adulthood and increased reliance on public support (Oreopolous et al. 2005).

Government transfers are one way to replace lost wage income. Indeed, generous income assistance during the first year-and-a-half of the pandemic was provided via extensive cash and near-cash transfers to households. These transfers benefited families with children through targeting children and, indirectly, by targeting workers with shorter or intermittent job tenure as well as part-time workers, who are disproportionately female and therefore more likely to live with children. It is important to note that many immigrant families, who were disproportionately affected by the pandemic by virtue of their high representation in service industries, did not benefit from these measures.

During the pandemic, the traditional Unemployment Insurance (UI) program was expanded to extend eligibility for UI benefits to groups not usually covered—including the self-employed, part-time workers, and those with short work histories—through the Pandemic Unemployment Assistance program, and intermittently to provide an extra \$600 or \$300 supplemental weekly UI

BOX 7.1

Evidence of the Relationship between School Closures and Labor Supply

Reduced school days and virtual school may have caused parents to stay out of the labor force or reduce their hours to care for their children. The evidence on the extent to which increased child-care demands explain the drop in labor force participation among women is mixed. Aaronson and Alba (2021) show that women's labor force participation dropped precipitously in March 2020. However, they find that factors such as school closures and virtual schooling had only a modest impact on the labor force participation rate of women and conclude that other factors such as women's predominance in service-oriented occupations must be at play.

Bauer et al. (2021) find that mothers of children ages 5–12 years saw a greater decline in employment than mothers with older children, and Hansen, Sabia, and Schaller (2022) find that the recent school reopenings have been associated with significantly increased employment and hours among married women with children in kindergarten through grade 12 (K-12). Garcia and Cowan (2022) find little effect of child-care and school closures on labor force participation but do find that parents reduced the number of hours they worked. Tedeschi (2020) also finds that school closures reduced women's labor force participation. On the other hand, Furman et al. (2021) find that nearly all of the aggregate, ongoing employment deficit among mothers is explained by factors that affect workers more broadly rather than challenges specific to working parents.

Overall, the evidence seems to suggest multiple factors (not just school closings) disproportionately affected women's labor supply and that a relevant margin is the intensive one—reduced hours of work.

benefit. These expanded UI benefits were not extended to anyone without proper work authorization, thereby excluding families with undocumented workers.

In addition, there were three rounds of Economic Impact Payments (EIPs), all of which increased payments with the number of children in the household. The first round provided \$1,200 to single head of households with income below \$112,500 and \$2,400 to married couples with income less than \$150,000, with an additional \$500 for each qualifying child.² The second round cut the initial payment in half but increased the incremental benefit based on the number of children to \$600 per child, and the third round increased the initial payment and each additional payment per child to \$1,400. Some, but not all, immigrant families were eligible for these funds.³

^{2.} The threshold was \$75,000 for single filers.

^{3.} Children of undocumented parents were not eligible for any of the EIPs. For the children of immigrant families, the first EIP required all adults to have a valid social security number

Finally, the American Rescue Plan Act (ARP) increased the Child Tax Credit (CTC) from \$2,000 to \$3,600 per child under 6 and to \$3,000 per child aged 6–17 and made the credit fully refundable, but only for 2021. In addition to these income transfers, pandemic relief also included increases in near-cash transfers through the Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp Program) and the Pandemic Electronic Benefit Transfer (Pandemic EBT) program to purchase groceries. The latter provided a debit card to families with children to be used to purchase food in lieu of meals missed because of school closings.

When both near-cash transfers and cash transfers are included in an income measure, as in the Supplemental Poverty Measure (SPM), the effects of fiscal support can be seen to more than mitigate the impact of the pandemic on child poverty. In contrast the official child poverty (OPM) rate (calculated based on pretax income and cash transfers including UI but excluding refundable tax credits) rose during the pandemic from 15.5 percent in 2019 to 16.1 percent in 2020 (Figure 7.1). However, once government transfers (e.g., EIPs, SNAP, the National School Lunch Program, and the Special Supplemental Nutrition Program for Women, Infants, and Children [WIC]) and tax credits (the Earned Income Tax Credit [EITC] and CTC) are accounted for via the SPM, child poverty fell from 12.6 percent in 2019 to 9.7 percent in 2020 (Fox and Burns 2021).⁴

This decline was greater than the decline in the adult SPM, which fell from 11.2 to 8.8 percent over the same period. This experience contrasts somewhat with the trends in child poverty after the Great Recession, when the SPM for children held steady but did not decline. For children, the most important factors keeping them out of poverty in 2020 (in order) are the EIPs, refundable tax credits (EITCs and CTCs), UI, and SNAP.⁵ Temporary Assistance for Needy Families and WIC played only small roles (see Box 7.2 for a detailed comparison of the OPM and SPM).

These government transfers reduced financial hardship for families with children: the share of families with children facing food insecurity, difficulty

(SSN), excluding all mixed status households. The second round of payments included mixed status households, but at least one adult needed a valid SSN not just an individual taxpayer identification number (ITIN) and work authorization. The third stimulus allowed for dependents of ITIN–filers to claim the payment if they had valid social security numbers. Children with a valid SSN were eligible for the expanded CTC if their parents had a valid SSN or ITIN.

- 4. These reductions in measured poverty, based on the Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS), likely understate the true impact of federal pandemic relief on child poverty. While the Census imputes EIPs in the CPS so that they roughly match actual payments (Bee et al. 2021), no such adjustments are made for SNAP and UI benefits, which were significantly underreported in these data, a long-standing problem made worse by the pandemic. In particular, total UI benefits reported in the 2020 are just 40 percent of the total actually paid out, and total SNAP benefits are 44 percent.
- 5. The programs keeping adults out of poverty in 2020 are (in order) Social Security, Economic Impact Payments, UI, and tax credits.

FIGURE 7.1

Poverty Rate for Children 0–18, Official and Supplemental Measures



Source: Columbia University Center on Poverty and Social Policy 2021; Current Population Survey Annual Social and Economic Supplement n.d.



Note: For additional details, see Box 7.2 of this chapter.

paying usual household expenses, or difficulty paying rent or mortgage was lower than would have been expected given economic conditions (Cooney and Shaefer 2021). Despite very high unemployment rates, reported hardship was largely stable during the first few months of the pandemic, though it began rising again in late fall 2020 as the economy stalled and the benefits of the first set of transfers began to fade. Cooney and Shaefer (2021) report that between November and December 2020, the share of families with children who found it "very difficult to pay for usual household expenses" increased from about 19 percent of all families with children to 23.1 percent. However, after December 2020, when Congress provided another round of EIPs and increased SNAP benefits under the Consolidated Appropriations Act, that share began to decline, dropping to 19.5 percent of families in March of 2021; following the passage of the ARP, which included the third round of EIPs and an increase in the CTC, it dropped to 13.5 percent by May 2021. This pattern repeats with food insecurity for households with children (18.3 percent in December 2020, falling to 11.3

BOX 7.2

The Official Poverty Measure and the Supplemental Poverty Measure

The Supplemental Poverty Measure (SPM) was developed in 2011 to address some of the shortcomings of the Official Poverty Measure (OPM). First, while the OPM is exclusively based on cash income, the SPM includes in-kind government non-health benefits (e.g., food assistance through SNAP and WIC, and housing subsidies) as well as refundable tax credits such as the EITC. Moreover, the SPM removes nondiscretionary expenses (income and payroll taxes, medical out-of-pocket expenditures, and work expenses) from the income measure, whereas the OPM is based on pretax income. Second, while the poverty thresholds for the OPM are based on the cost of a minimum food diet, the poverty threshold for the SPM is based on expenditures for food, clothing, shelter, and utilities and is adjusted for geographic differences in the cost of living.

With respect to pandemic-related transfers, the OPM accounts for expanded UI benefits, but only the SPM captures the EIPs, increased housing assistance, and the SNAP, CTC, and EITC expansions.

percent by May 2021) and housing hardship (15.7 percent in December 2020, falling to 10.6 percent in May 2021).⁶

The policy response during the pandemic differed from government support during prior recessions in three key respects. First, there were much larger cash transfers to the unemployed, including people with less attachment to the labor force (part-time workers or those with short work histories) who are more likely to be parents. Second, the value of EIPs increased with the number of children in the household and were not conditioned on labor force attachment, thereby reaching children at risk of deep poverty who typically do not benefit from UI during recessions. Third, refundable tax credits became more generous, and these went primarily to households with children (EITC) or only to households with children (CTC). This contrasts with the Great Recession, when relief was both much less substantial and less progressive and did not target children to the same degree; as a result, child poverty, and especially deep poverty, was less responsive to government aid (Moffitt 2013).⁷

^{6.} Housing hardship is defined as a negative response to the question "Is this household currently caught up on rent/mortgage payments?"

^{7.} In the Great Recession, income support was provided mostly through the traditional UI program but also through expansions in EITC, the CTC and SNAP. Annual SNAP spending increased from \$30 billion to \$65 billion, the EITC rose from \$49 to \$59 billion, and UI increased from \$34 to \$142 billion between 2007 and 2010. Congress expanded the CTC in

Child poverty is projected to have fallen further in 2021 due to continued UI benefits, EIPs, SNAP expansions, and, most importantly, the expansion in the CTC to \$3,000 per child (\$3,600 for children under six) and its extension to households with very low or no earnings. The Urban Institute expects that the SPM rate in 2021 will fall to 8.1 percent for adults 18–64 and to 5.6 percent for children; this would represent the first time the child poverty rate has fallen below the rate for adults (Wheaton, Giannarelli, and Dehry 2021). Moreover, the various transfers disproportionately affected Black and Latino children. Their poverty rates in 2021 are projected to be 13 and 12 percent, respectively, much lower than the 22 percent and 21 percent that would have prevailed in the absence of the ARP. For white children, the poverty rate is expected to be 6 percent in 2021, compared to 9 percent in the absence of the ARP (Center on Budget and Policy Priorities 2021).

However, much of this progress appears to have been reversed in early 2022. With employment levels not yet rebounded to pre-pandemic levels, expanded UI benefits largely expired, and with the CTC not extended, early estimates suggest that the poverty rates for children increased from 12.1 percent in December 2021 to 17 percent in January 2022, with disproportionate effects for the most disadvantaged (Figure 7.2).⁸ Indeed, the CTC was estimated to have kept 3.4 million children out of poverty in September 2021 when expanded UI benefits ceased, and in January 2022, after the expanded CTC ended, it was estimated that 3.7 million children fell below the poverty line without the monthly CTC (Bee, Hokayem, and Lin 2021). Given the evidence on the negative effects of poverty on child development, this reversal will increase disparities in child outcomes that will likely result in worse labor market outcomes, health, and well-being in adulthood (National Academies of Sciences, Engineering, and Medicine 2019).

Education and Virtual Schooling

The pandemic led most schools to close nationwide for the final months of the 2019–20 school year, a large number to be closed during the 2020–21 school year, and many schools to close intermittently during the 2021–22 school year. As a result, many students lost more school days than in previous years (West and Lake 2021). Disruptions in education for children can have long-lasting effects. While we hope and expect that the next recession will not coincide with widespread school closures, children's education can suffer in a typical recession too. Instability in the household affects learning, and due to revenue

²⁰⁰⁹ by lowering the refundability threshold from \$8,500 to \$3,000, which was extended and eventually made permanent in 2015.

^{8.} The employment-to-population ratio was 59.3 percent as of December 2021, compared with 61.2 percent pre-pandemic. The unemployment rate was 3.9 relative to 3.5 percent pre-pandemic (Bureau of Labor Statistics 2022).

FIGURE 7.2

Effect of Child Tax Credit Policy Changes on Child Poverty, by Race



Source: Center on Budget and Policy Priorities 2021.

Note: All estimates reflect a pre-pandemic economy, using tax year 2021 tax rules and incomes adjusted for inflation to 2021 dollars. Full refundability means that families with little or no income for the year can receive the full credit. American Indian and Alaska Native



(AIAN) children may be AIAN alone or in combination with other races and ethnicities. Other racial/ethnic groups refer to children of that race alone and not Latino. The middle bar shows estimated child poverty rates if the Child Tax Credit were expanded to \$3,600 per child under 6 (\$3,000 per child 6-17) but retained the \$2,500 earned income floor and 15% phase-in rate present under pre-Rescue Plan law but removed the \$1,400 per child cap on refundability.

losses already sustained or expected in the future, state and local governments generally cut funding for education.

Relative to previous recessions, the federal government provided much more financial assistance both directly to schools and to state and local governments more broadly. Federal funding for schools was increased to support new pandemic-related outlays, including a transition to online learning. The federal government provided nearly \$200 billion in federal aid to state education in three relief packages via the Elementary and Secondary School Emergency Relief Fund (NCSL 2022). Most of the federal funding for schools during the pandemic, including \$122 billion in federal aid to states for K-12 spending provided through the ARP and \$54 billion through the Coronavirus Response and Relief Supplemental Appropriations Act, was distributed in proportion to Title I funding, which provides supplemental funding to high poverty districts. In addition, about \$750 billion in additional aid was provided to state and local governments (see chapter 6 of this volume).

These outlays far exceeded increased federal funding for schools provided during the Great Recession. The American Recovery and Reinvestment Act (ARRA) of 2009 earmarked \$53.6 billion for education through the state fiscal stabilization fund and \$25.2 billion in K-12 education funding through Title I and the Individuals with Disabilities Education Act (U.S. Department of Education 2009). The ARRA also provided other aid to states to help stabilize state budgets and meet other needs, primarily through an increase of 6.2 percentage points in the federal share of Medicaid expenditures (the Federal Medical Assistance Percentage or FMAP). Despite the greater support that states received since early 2020, it turned out that state revenue losses during the pandemic were much more muted and temporary than during the Great Recession.

However, although the level of federal support has been considerably higher, there have still been gaps and shortfalls. Despite the large overall size of the federal aid, Gordon and Reber (2021) estimate that in a baseline scenario, only 62 percent of districts, and 95 percent of high poverty districts (defined as a poverty rate in excess of 25 percent), have received enough Elementary and Secondary School Emergency Relief Fund aid to cover fully the costs associated with COVID-19, including costs expected to be incurred in the years ahead to address learning losses.⁹ While acknowledging significant uncertainty, they estimate that 85 percent of lower-poverty districts (defined as a poverty rate below 10 percent) are expected to face an increase in budgetary shortfalls of more than \$200 per student for four years, with some districts experiencing budgetary shortfalls larger than that. In addition, the decline of employment in the K-12 sector has been stark—and much larger and faster than in the Great Recession (Aldeman 2021).¹⁰

In the wake of more typical recessions, cuts to state and local school funding can be severe, persist for years after the recession ends, and negatively affect student outcomes. When revenues fall, local governments often struggle to compensate as their revenue is dependent both on state funding and on another somewhat procyclical source: property taxes. During and after the Great Recession, state K-12 funding fell between 2008 and 2010 by \$750 per pupil, with local funding remaining stable until 2010 when it too began to decline, though by a smaller amount (\$200 per pupil). By 2015, nearly seven years after

^{9.} In the baseline scenario they simulate, Gordon and Reber (2021) assume districts have one-time adjustment costs of \$500 per pupil that do not depend on student demographics. They also assume districts must spend an additional \$1,000 per student in poverty and \$500 per student not in poverty per year for four years starting in 2020–21 to address learning loss and other problems created by the disruption to schooling.

^{10.} See chapter 6 of this volume.

the start of the Great Recession, funding had still not returned to 2008 levels, with schools, on average, spending \$400 less per pupil (Leachman, Masterson, and Figueroa 2017). States with lower initial funding levels before the Great Recession had worse outcomes for students during the Great Recession: lower test scores and college attendance (Jackson, Wigger, and Xiong 2021). Spending cuts during the Great Recession increased test score gaps by income and race (Jackson, Wigger, and Xiong 2021).

Conversely, increases in spending on education can positively affect academic achievement, educational attainment, and eventually wages. A 10 percent increase in per-pupil spending each year for all 12 years of public school is estimated to lead to 0.31 more completed years of education, about 7 percent higher wages, and a 3.2 percentage point reduction in the annual incidence of adult poverty (Jackson, Johnson, and Persico 2016).¹¹

Despite the generous federal aid, students' education suffered during the pandemic, and significant resources will be necessary to address the learning losses. Not surprisingly, gains in student test scores in 2020–21 were lower than pre-pandemic trends. As a result, students completed the school year with lower achievement in math (8–12 percentile points) and reading (3–6 percentile points) relative to typical years (Lewis et al. 2021).¹² Dorn et al. (2021) find that students were, on average, five months behind in math and four months behind in reading by the end of the 2021 school year. Halloran et al. (2021) find that passing rates in math and English language arts declined more in districts with less in-person instruction than in districts that were fully in-person.

In addition, according to data emerging from states and school districts, fewer students than normal are regularly attending class: reported rates of absenteeism have increased during the pandemic compared with previous years (Carminucci et al. 2021; West et al. 2021). The negative short-term effects of the pandemic on student outcomes are likely to have significant long-term implications with respect to student learning, educational attainment, wages, and health. The closing of schools is likely to be one of the most important legacies of the pandemic.

While some estimates suggest that the direct Elementary and Secondary School Emergency Relief (ESSER) funding to schools to address learning losses was not sufficient (Gordon and Reber 2021), these are based on simulations

^{11.} Other work consistent with this includes Lafortune, Rothstein, and Schanzenbach (2018), who use the timing of school finance reforms to show that post-1990 school finance reforms increased National Assessment of Educational Progress test scores in districts that received more money. Rothstein and Schanzenbach (2021) also find that school finance reforms post-1990 increased high school completion, earnings, and college-going. The results were largest for Black students and women.

^{12.} MAP Growth is a computer adaptive test that is vertically scaled across grades K-12 and measures student achievement in reading and math on the Rasch Unit scale. Using MAP Growth data, researchers converted the data on student test scores to percentile rankings, which were calculated using a pre-pandemic sample of students, so that student achievement could be compared across years.

FIGURE 7.3 Distribution of Per-Pupil ESSER Funding



that assume how much remediation will eventually cost. Moreover, it is not yet clear whether states and local education agencies will make the necessary remediation investments. School systems often do not want to spend one-time federal money on programs for which there will be continued demand after the pandemic (see chapter 6 of this volume), and so they may be unwilling to use the federal money to fund new teachers or other programs that might benefit students in the long run (see Figure 7.3). The ARP stipulates that localities must devote to remediation at least 20 percent of the roughly \$115 billion in funds in the third round of education funding earmarked for local agencies, but the true cost of needed remediation could be more than this.¹³ Moreover, K-12 employment is still below pre-pandemic levels, so increases in spending may not increase overall resources above and beyond a pre-pandemic baseline.

The federal government's provision of substantial funding to states to compensate for state and local revenue shortfalls likely will reduce cuts in overall education spending and lower geographic and income disparities in funding. But providing state and local governments with large amounts of funding does not guarantee that it will be used in the most efficient way. The federal government should develop guidance for states regarding prudent and sustainable spending that improves student outcomes.¹⁴ This effort would be supported by collecting data on state decisions regarding the amount and allocation of school spending over time to assess the effectiveness of various types of spending in improving child educational outcomes. Federal action might be needed to ensure educational investments in all children across the U.S. return to pre-pandemic levels.

Child Care

Child-care employment falls during most recessions, in part because families in the U.S. are responsible for more than half of spending on early childhood care (Gould and Blair 2020). However, child-care employment fell much more than is typical during the pandemic, declining 32.6 percent from January to April 2020, compared with a 13.1 percent decline in employment overall (Gascon and Werner 2022). In mid-2021 employment in child care was still 6.7 percent below pre-pandemic levels. The closure of child-care facilities has been shown to affect overall unemployment levels (Brown and Herbst 2021); the continued lack of adequate access to quality child care will likely delay returns to pre-recession employment levels.

The federal government provided about \$55 billion in support to child-care centers to help them weather the pandemic.¹⁵ In addition, child-care centers were eligible for grants (in the form of forgivable loans) through the Paycheck Protection Program (PPP). According to the Bipartisan Policy Center, 43,000 child-care providers received \$2.3 billion in PPP funding—representing less

^{13.} In the third round of funding for K-12 education, \$127.7 billion was allocated. Of that, 90 percent is to go to local agencies (representing roughly \$115 billion). The remaining 10 percent goes to states. States are required to allocate 5 percent to remediation (National Conference of State Legislatures 2022).

^{14.} See, for example, Gordon's (2016) policy proposal to increase the targeting, flexibility, and transparency of Title I funding of the Elementary and Secondary Education Act.

^{15.} The CARES Act provided \$3.5 billion, the Coronavirus Response and Relief Supplemental Appropriations Act provided \$10 billion, and the ARP an additional \$42 billion, compared with \$2 billion provided through the ARRA of 2009.

than 7 percent of child-care businesses in the country but about 30 percent of the child-care workforce (Smith et al. 2021). The level of funding provided far exceeds the \$4 billion in funding through Head Start and the Child Care and Development Fund (CCDF) provided during the Great Recession. The child-care center closures observed would likely have been much greater in the absence of this relief.

Most of the pandemic funding was allocated through CCDF, and states were granted significant leeway in how they chose to allocate funds. They could increase subsidy payments to families and/or provide direct grants to child-care providers.¹⁶ Importantly, payments could be based on enrollment rather than on attendance to support stability in the child-care sector. Preliminary evidence as of June 2020 suggests that the funds were being used to pay providers during periods of closure or low attendance and to waive or cover a family's share of child-care costs (Bedrick and Daily 2020).

Despite the overall size of child-care relief provided during the pandemic, many centers closed and their child-care utilization has not fully rebounded. A plurality of families with young children, even more so families of color, were negatively affected by child-care closures (Lee and Parolin 2021; Health Resources and Services Administration 2021; National Public Radio 2021). Measuring child-care visits based on cell phone tracking data, the number of visits is estimated to have declined 60 percent in the first two months of the pandemic, rebounding to a 20 percent deficit by July 2020 and a 12 percent deficit by July 2021 (Cascio 2021; Lee and Parolin 2021; see Figure 7.4). Of the two-thirds of private child-care centers that closed in April 2020, a third remained closed one year later; this contrasts with the experience of Head Start and public preschools, which closed temporarily but eventually reopened.¹⁷

Why wasn't federal funding sufficient to prevent the closure of so many private child-care centers? One likely reason is that the move to work from home and fears of COVID transmission led to a sustained reduction in demand for child care. Another is that most of the additional funding for private child-care centers arrived too late. In a March 2020 survey, nearly a third of child-care providers said they could not survive a closure of more than two weeks without support, 16 percent could not survive longer than a month, and 17 percent said they could not survive any amount of time (National Association for the

^{16.} In total, \$24 billion of the ARP funds were allocated through "stabilization grants." Guidance provided by the ACF to states via CCDF-ACF-IM-2021-02 stated that "providers can spend these funds on a variety of key operating expenses, including wages and benefits, rent and utilities, cleaning and sanitization supplies and services, and many other goods and services necessary to maintain or resume child care services...We encourage lead agencies to award these subgrants simply and flexibly to quickly meet the individual needs of child care providers" (Administration for Children and Families 2021).

^{17.} During the early days of the pandemic, "the vast majority of Head Start programs have temporarily shut their doors due to health risks, but all staff remained employed" and continued to interact with their families at high rates (NHSA 2020).

FIGURE 7.4

Average Change in the Number of Child Care Visits from 2020 through 2021



Education of Young Children 2020). The first state-wide lockdowns began in mid-March 2020, but the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which authorized the initial PPP loans, did not become law until March 27; this would have already been too late for nearly half of the child-care centers surveyed (National Association for the Education of Young Children 2020). Considering delays in the application and disbursement process, approximately two in three child-care centers would already have been in significant distress by the time the loan was out the door (Department of the Treasury 2021). Funding specifically geared toward child-care centers (as distinguished from resources through PPP) came even later—enacted only in March 2021 as part of the ARP, after many centers had permanently closed.

However, Head Start and public prekindergarten remained open. The structure of funding differs across public (Head Start and public preschool) and private providers, with significant implications for the providers' financial stability. Public funding for Head Start and public preschool is based on enrollment. As a result, providers have a predictable and stable source of funding that is not closely tied to actual attendance. In contrast, public subsidies for private care are voucher based, and their funding therefore fluctuates with actual attendance.

While it is difficult to separate the direct impact of the pandemic on the child-care industry from the lack of stable financing, several lessons emerge from the pandemic experience. Federal support to states through CCDF that subsidizes care for low-income families and offers direct grants to providers is crucial for reducing closures. Providing funds to providers through the program based on enrollment, not attendance, would help to stabilize finances during recessions. Moreover, in future recessions, the federal policy response should be immediate to prevent initial closings.

The pandemic experience has made clear that once centers close, additional funding may not be sufficient to resurrect them. Moreover, the closure of private child-care centers appears to disproportionately affect the most disadvantaged families. While Head Start partially offsets the disproportionate impact of these closings, it serves roughly 5 percent of the 20 million children in the U.S. aged four and under and as such cannot completely offset the loss of private providers.¹⁸

Finally, the data on child-care use and availability are poor to nonexistent, making it difficult to monitor and address issues related to child-care access that will almost surely arise in the next recession. This owes in part to the highly decentralized nature of early childhood education in the U.S., which is spread across private providers, public preschools, and Head Start and Early Head Start programs. Developing a means of collecting timely information on the availability and use of early childhood education is necessary to provide policymakers with the tools needed to address and prevent child-care closures in the next recession.

Health Insurance

Because more than half of all Americans receive their health insurance through their employers (Table 7.1), employment losses during recessions can significantly increase the share of individuals without coverage. The loss of health insurance can be especially detrimental to children. Children with health insurance are more likely to receive needed medical care on a timely basis, and child Medicaid coverage has been linked to better health and even greater educational attainment and earnings in adulthood (Currie and Gruber 1996; Brown et al. 2019).

Despite the unprecedented declines in employment during the pandemic, public health insurance did work to offset the accompanying loss in employer-provided

Head Start cumulatively served one million children aged zero to five in 2018–2019. Of these, 25 percent were children aged zero to two served in Early Head Start, and the remainder were served in Head Start preschool programs.

TABLE 7.1 Health Insurance Coverage in 2019, by Age

	Rates of Health Insurance Coverage		Sources of Health Insurance Coverage		
Age	Uninsured	Insured	Public	Employer	Individual
0-18	5.7%	94.3%	34.5%	54.9%	5.0%
19-64	12.8%	87.2%	15.1%	64.3%	7.8%
65+	0.8%	99.2%	95.8%	3.0%	0.4%

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Source: SHADAC analysis of the 2019 American Community Survey (ACS) Public Use Microdata Sample (PUMS) files.

Note: Respondents are asked about their health insurance coverage at the time of the interview and may select multiple types of coverage; SHADAC assigned one coverage time to each respondent in the

following order: 1) Medicare (for people age 19 or older); 2) employer-sponsored insurance (ESI), TRICARE or other military health care, or VA; 3) Medicaid; 4) Individual coverage; and 5) Medicare (for people age 18 or under). Private coverage includes employer (plus TRICARE and VA) and individual coverage. Public coverage includes Medicaid (plus CHIP and state-specific public programs) and Medicare.

health insurance coverage. Medicaid was the most important source of alternative health insurance. Key to the successful transition of families to Medicaid were the Affordable Care Act's (ACA) expansion of Medicaid eligibility to more nonelderly and nondisabled adults, including many parents, and the requirement for continuous coverage that accompanied a temporary increase in the federal contribution to overall Medicaid costs that lower prices.

Largely as a result of the eligibility expansions in the ACA, Medicaid enrollment increased by roughly 10.9 million between 2013 and 2016 (Skopec, Holahan, and Elmendorf 2018). Though eligibility for Medicaid did not expand among children, the increase in Medicaid eligibility among adults had the effect of increasing the number of children enrolled in Medicaid by an additional 710,000 children between 2013 and 2016 via a "welcome mat" effect (Hudson and Moriya 2017). Thus, in contrast to the Great Recession, the current pandemic occurred at a time when many more adults were eligible for Medicaid.

Because Medicaid is funded with a combination of federal and state dollars and is one of the biggest items in state budgets, states often seek to curtail Medicaid outlays by dropping coverage of optional benefits or populations in an effort to reduce expenditures during recessions (Congressional Research Service 2021). At the earliest stages of the pandemic, in March 2020 the federal government moved quickly to reduce barriers to Medicaid enrollment. Swift action was undoubtedly prompted not only by the significant loss in employment and associated coverage but also by the health needs generated by the pandemic. The federal effort was composed of three main components. The first was to increase FMAP—the share of state Medicaid costs that the federal government covers—by 6.2 percentage points on a temporary basis. This has been used as a policy tool in the past: FMAP was increased during the 2001 recession and the Great Recession of 2009.¹⁹ The second was a reduction in administration hurdles: as a condition of receiving additional federal dollars, states could not (for the period for which FMAP is increased) restrict Medicaid eligibility standards beyond those in place as of January 1, 2020, and they also had to allow for continuous enrollment (i.e., they could not remove people from the Medicaid roles due to changes in income or other such factors or require them to reapply periodically to remain enrolled).

The third component of the federal policy response was to provide additional support to Americans seeking private health insurance coverage to offset the loss of employer-provided insurance. To that end, through the ARP the federal government provided Consolidated Omnibus Budget Reconciliation Act (COBRA) subsidies to Americans who had lost their employer-provided health insurance because of termination or reduction in hours and who sought to continue via COBRA the coverage they previously had through their employer. A 100 percent COBRA subsidy was provided for April to September 2021, and the legislation also allowed for retroactive enrollment. This option was used during the Great Recession as well but at a lower subsidy rate (65 percent).

The federal relief effort to expand access to private insurance for those who may have lost their employer-provided insurance also included efforts to expand access to the ACA exchanges. The ACA exchanges, created after the Great Recession, represented a new mechanism for the government to ensure continuous coverage when families lost their employer-provided coverage. The ARP not only required the exchanges to remain continuously open for new enrollment but also increased the subsidies for those with an income between 100 and 400 percent of the federal poverty level and expanded the subsides to those above 400 percent of the federal poverty level for 2021 and 2022. Under the ARP, premiums also decreased.²⁰

The federal efforts to mitigate the expected loss in health insurance coverage during the pandemic were largely successful. The share of children who are uninsured appears to have increased only slightly during the pandemic, from 5.2 percent in 2019 to 5.6 percent in 2020. Children most likely to lose

This was through the Jobs and Growth Tax Relief Reconciliation Act of 2003 and the ARRA of 2009.

^{20.} Under the ARP, premiums were set to zero (for the benchmark Silver plan) for those with income below 150 percent of the federal poverty level and were roughly halved for those between 150 and 400 percent of the federal poverty level. For those with income above 400 percent of the federal poverty level who were ineligible for subsidies before the pandemic, the ARP capped their premium at 8.5 percent of income. The Congressional Budget Office projected total federal outlays associated with these subsidies of \$34 billion (Congressional Budget Office 2021).

FIGURE 7.5 Enrollment in Medicaid and CHIP, January 2016 to July 2021



revised their methodology to better align with CMS Eligibility and Enrollment Reports criteria; data reported for May 2017 and earlier months were not updated to reflect this change. These totals exclude states where data were not reported and are subject to change.

insurance over this period were those below the poverty line, Black children, and noncitizens. The increase in uninsurance among children represents two offsetting factors—a 2.1 percentage point decline in the rate of employer-sponsored coverage and a 1.7 percentage point increase in public coverage, with most of this growth from Medicaid (Figure 7.5). A much smaller share of children gained coverage through the ACA exchanges.²¹

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Preliminary evidence suggests that rates of uninsurance for children may have fallen in 2021. Data from the National Health Interview Survey, which is not directly comparable to figures based on the Current Population Survey, show a decline in uninsurance rates among children from 5.1 percent of children

^{21.} Overall exchange enrollment increased from 9.7 million in 2019 to 10.6 million in 2020, 12.2 million in 2021, and 14.5 million in 2022, of whom 12 percent were children (Ruhter et al. 2021; Centers for Medicare and Medicaid Services 2021, 2022).

being uninsured in 2020 to 4.4 percent for the first six months of 2021. This decrease was driven by increases in public health insurance coverage, more than offsetting the fall in the share of children with private insurance coverage, from 54.9 percent to 53.1 percent (Cohen et al. 2021).

In sum, despite the unprecedented decline in employment during the pandemic, public health insurance offset the loss of employer-based health coverage. The ACA's expansion of Medicaid and its creation of health insurance marketplaces, and the subsidies to make coverage affordable, played important roles in this, especially since they were strengthened by the requirement for continuous coverage in Medicaid and the increases in ACA subsidy levels.

During the Great Recession, Medicaid played a similarly important role for children but much less so for adults. Between 2009 and 2010, 700,000 children lost employer-provided health insurance coverage, almost fully offset by a 600,000 increase in the number of children with Medicaid. In contrast 500,000 nonelderly adults lost employer-provided health insurance during this time period but only 100,000 gained Medicaid coverage and had no opportunity, of course, to purchase subsidized coverage on an exchange (Holahan and Chen 2011).

Food and Nutrition

Increases in poverty are normally accompanied by increases in food insecurity (Anderson et al. 2012). So, as earned income declines in recessions, food security usually does as well. During the pandemic, in addition to the loss of employment and earned income associated with the recession, the closure of schools interrupted an important source of nutrition for 30 million children, including the undocumented, through the National School Lunch and Breakfast programs.²²

A critical difference in the policy response during the COVID-19 recession and previous ones was the larger amount of direct income assistance. While not specific to purchasing food, this assistance nevertheless contributed to food security. UI, EIPs, and the increased value and full refundability of the CTC increased resources and supported household economic security in 2020 and 2021. In addition to the magnitude of overall income assistance, the support provided immediate income to families that in many cases exceeded pre-pandemic levels. Evidence suggests that families used some of the resources provided through these programs to purchase food, reducing food insecurity (Raifman, Bor, and Venkataramani 2020; Perez-Lopez 2021; Cooney and Shaefer 2021).

The federal government provided additional financial resources to purchase food through SNAP and Pandemic EBT, supported prepared meals that could be accessed in the community, appropriated additional resources for

^{22.} Undocumented individuals and people in the United States on temporary visas are not eligible to receive SNAP or many other forms of government aid.

WIC vouchers, and distributed commodities to food banks to combat food insecurity. Moreover, executive and congressional action reduced administrative burdens to make it easier for families to get and retain access to federal nutrition assistance programs and for states to provide free prepared meals at a wider number of sites and to redirect commodities toward food banks and households.

Federal expenditures on food support increased to \$10 billion a month, on average, in fiscal year 2020, compared with \$7.7 billion a month in fiscal year 2019 (Hodges, Jones, and Tossi 2022). In comparison, during the Great Recession, the ARRA provided \$53.6 billion to help combat food security, significantly less than what was provided during the pandemic (Nord and Prell 2011).

The Families First Coronavirus Response Act increased SNAP spending by allowing every household to receive the maximum benefit for its household size—that is, by eliminating the reduction in benefits that typically occurs as family income increases (typically, SNAP benefits are scaled by family income). Under this policy, more than 5 million children in the lowest income families did not receive any additional SNAP benefits because their families were already eligible for the maximum benefit for their household size. In contrast, during the Great Recession, the SNAP maximum benefit was increased by 13.6 percent through the ARRA, better targeting resources to low-income families with children and reducing hunger among children (Nord and Prell 2021; Hoynes and Schanzenbach 2019).

In 2021, federal nutrition assistance better targeted the lowest income households. The December 2020 relief bill included a 15 percent increase in SNAP's maximum benefit for January through June 2021, and the ARP extended the maximum benefit increase through September 2021. As this benefit increase ended, the summer 2021 annual update to the Thrifty Food Plan, the basis for the establishment of SNAP benefit levels, came into effect. This update increased maximum SNAP benefits by 21 percent, more than offsetting the end of the temporary 15 percent increase in maximum SNAP benefits at the end of September. In addition, the state of Pennsylvania successfully sued to allow SNAP households eligible for the maximum benefit to receive an additional \$95 monthly starting in April 2021 to address continued food insecurity (Pennsylvania Department of Human Services 2022; U.S. Department of Agriculture 2021). Congressional action also reduced administrative burdens to make it easier for families to get and retain access to federal nutrition assistance programs and for states to provide free prepared meals at a wider number of sites and to redirect commodities toward food banks and households.

While prepared meals for children attending school in person remained available, the Pandemic EBT program provided families with a debit card to purchase groceries for children eligible for free or reduced-price meals, including undocumented children, while schools were closed. The program was in some cases slow to roll out because "states had to design and staff a new program infrastructure, as well as create new policy to govern the program" (Dean et al. 2020). But ultimately, the program "reached a remarkable number of children quickly at a time of great need." In September 2020, when the program was reauthorized for the 2020–21 school year, it was expanded to needy children 0–5. Early evidence suggests that Pandemic EBT reduced food hardship experienced by children in 2020 and 2021, though implementation delays and administrative hurdles made this program less effective than it otherwise could have been (Bauer, Ruffini, and Schanzenbach 2021; Bauer et al. 2020). Importantly, the Pandemic EBT program reached children with undocumented parents who otherwise would not have been eligible for SNAP or other income support.

On another front, the Farmers to Families Food Box Program authorized the U.S. Department of Agriculture to purchase food from U.S.-based producers to donate them to food banks and other charitable organizations. The CARES Act also included an additional \$400 million for direct food purchases for The Emergency Food Assistance Program, which allows the U.S. Department of Agriculture to purchase food to give to states, which in turn pass it on to food banks for distribution. However, there is evidence that many food banks could not keep pace with demand for food during the pandemic. This is because many food banks depend on retailers' donations of excess inventory, and many retailers imposed quantity restrictions on food purchases during the pandemic (Bublitz et al. 2020). These interruptions had the potential to significantly exacerbate food insecurity among American children.

Additional financial resources provided to families as part of the federal relief efforts coincided with immediate reductions in estimates of food insecurity, suggesting that federal relief efforts were somewhat, but not entirely, effective (Figure 7.6).²³ Food insufficiency among households with children started to decline in January 2021 after the 15 percent increase in the maximum SNAP benefit was implemented, declined again in March 2021 after the EIP, and declined again in July of 2021 after the first CTC payment but increased in October 2021 after the UI boost expired. Undocumented migrant farmworker households reported some of the highest rates of food insecurity during the pandemic (Burton-Jeangros et al. 2020), which is consistent with their being less likely to take up SNAP and WIC (Pelto et al. 2020).²⁴

^{23.} This real-time measure of food insufficiency shows the relationship between the timing of resources and food hardship, while the annualized statistics report a cumulative and retrospective measure of food insecurity. Unfortunately, the data are only available using consistent methods of data collection during the pandemic, so it is difficult to compare these data to data on food insecurity from before the pandemic.

^{24.} In a study of primarily Spanish-speaking families participating in the WIC program and presenting for pediatric care in Texas, 64 percent reported food insecurity between April and May 2020 (Abrams et al 2020).

FIGURE 7.6

Rates of Food Insufficiency in the Last Seven Days, May 2020–January 2022



Source: Census Household Pulse Survey 2020–22; authors' calculations.

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Note: Households are considered food insufficient if they report that they are sometimes or often not able to get enough to eat in the previous 7 days.

Lessons for the Next Economic Downturn

Children suffered as a result of the pandemic and recession but less so than they would have without fiscal support. The (mostly) swift policy response is likely to pay significant dividends in terms of improved child nutrition, health, and academic achievement. Research suggests this will translate into improved future labor market outcomes and reduced reliance on public support relative to what otherwise have occurred (see Hendren and Sprung-Keyser 2020 for a review of the returns to public spending on children). However, some policies were more effective than others in relieving child suffering.

Cash and near-cash transfers, including SNAP, Pandemic EBT, CTC, UI, and EIPs, all reduced poverty, housing insecurity, and food insecurity. Targeting income transfers to those with less attachment to the labor force (often women) and families with children through direct payments and refundable tax credits are predicted to reduce the child poverty rate for 2021 to a level below the adult

poverty rate for the first time. The lesson here is that such policies are effective at reducing poverty even during times of economic stress.

Despite the unprecedented nature of the income support provided during the pandemic to families with children, it appears not to have been enough to prevent children from experiencing increased food insecurity. We need to understand whether some disadvantaged households failed to fully benefit from the fiscal support or whether it simply was not sufficient. It is also possible that food insecurity increased because of supply chain shortages that affected food availability more broadly. To fully understand food insecurity during the pandemic, we must continue collecting better data on food insecurity among different groups to understand how and why families fall through the cracks. Had the SNAP maximum benefit been increased earlier in the pandemic, food insecurity would likely have risen less among children.

Authorizing brand-new programs during a downturn has advantages and disadvantages. The new methods for delivering nutrition assistance—prepared meals at community sites, Pandemic EBT for out-of-school children, and new distribution channels for food banks—were targeted and pandemic-specific responses. However, there are certainly disadvantages to standing up new programs during a crisis. Better preparation in the ability to target resources to children, in nutrition assistance and other programs, would have sped resources and alleviated hardship during the early months of the recession.

There is evidence that school closings caused harm to children's academic outcomes, indicating that such actions should be minimized wherever possible. Providing school funding to the states will mitigate reductions in school budgets that usually follow recessions and typically take years to reverse. While linking the federal allocations to Title I had the effect of providing more aid to lower income states, a reassessment of whether the states hardest hit by the recession received adequate funding is needed to make sure such funding is most effectively targeted in the next recession.

One group of children who received little government support are children who are undocumented immigrants or the children of undocumented immigrants. For these children, schools can be an important delivery mechanism for providing aid (Brannen and O'Connell 2022; Rabbitt, Smith, and Coleman-Jensen 2016). Policymakers should find creative ways to leverage that mechanism in the next recession.

Flexible funding for private child care is crucial and must come early to prevent center closings. Private child-care providers can weather major downturns in the economy and concomitant reductions in use and remain open. In addition to arriving early, funding should be flexible (i.e., not tightly tied to actual utilization) and targeted to low-income families. Using CCDF to allocate funds minimizes any delay.

Subsidizing premium payments through the ACA exchanges and COBRA coverage increased health insurance coverage, though by far less than Medicaid, especially for children. A combination of Medicaid and adequate ACA subsidies

can largely offset declines in private health insurance coverage for children and parents during recessions. Providing enhanced Medicaid matching rates to the states, tied to requirements limiting states' ability to disenroll Medicaid beneficiaries, appears critical to achieving that result.

Better child-centric data collected early and at a high frequency are needed. While the Census Pulse survey was a very useful innovation, it was not designed to capture much child-specific information (i.e., no health insurance coverage questions related to children) and included child-specific questions only much later in the pandemic (i.e., questions on child-care visits were not included until April–July of 2021). Moreover, it suffered high rates of nonresponse and likely underreporting of safety net use as well. The lack of timely data makes it difficult for policymakers and others to monitor the impact of the recession on children and ascertain whether the federal response has been adequate.

References

- Aaronson, Stephanie A., and Francisca Alba. 2021. "The Relationship between School Closures and Female Labor Force Participation during the Pandemic." Blog. Brookings Institution, November 3, 2021.
- Abrams, Steven A., Ana Avalos, Megan Gray, and Keli M. Hawthorne. 2020. "High Level of Food Insecurity among Families with Children Seeking Routine Care at Federally Qualified Health Centers during the Coronavirus Disease 2019 Pandemic." *The Journal of Pediatrics 4*: 100044.
- Administration for Children and Families. 2021. "Information Memorandum ARP Act Child Care Stabilization Funds." Administration for Children and Families, Washington, D.C.
- Aizer, Anna, Shari Eli, Joseph Ferrie, and Adriana Lleras-Muney. 2016. "The Long-Run Impact of Cash Transfers to Poor Families." *American Economic Review* 106(4): 935–71.
- Akee, Randall K. Q., William E. Copeland, Gordon Keeler, Adrian Angold, and E. Jane Costello. 2010. "Parents' Incomes and Children's Outcomes: A Quasi-Experiment Using Transfer Payments from Casino Profits." *American Economic Journal: Applied Economics* 2(1): 86–115.
- Aldeman, Chad. 2021. "During the Pandemic, 'Lost' Education Jobs Aren't What They Seem." Brown Center Chalkboard (blog). Brookings Institution, Washington, D.C. March 2, 2021.
- Almond, Douglas, Janet Curries, and Valentina Duque. 2018. "Childhood Circumstances and Adult Outcomes: Act II." *Journal of Economic Literature* 56(4): 1360–1446.
- Anderson, Patricia, Kristin F. Butcher, Hilary W. Hoynes, and Diane W. Schanzenbach. 2012. "Understanding Food Insecurity during the Great Recession." Working Paper. Dartmouth College, Wellesley College, University of California, Davis, and Northwestern University.

- Bauer, Lauren, Abigail Pitts, Krista Ruffini, and Diane Whitmore Schanzenbach. 2020. "The Effect of Pandemic EBT on Measures of Food Hardship." Brookings Institution, July 30, 2020.
- Bauer, Lauren, Arindrajit Dube, Wendy Edelberg, and Aaron Sojourner. 2021. "Examining the Uneven and Hard-to-Predict Labor Market Recovery." *Up Front* (blog). Brookings Institution, Washington, D.C. June 3, 2021.
- Bauer, Lauren, Krista Ruffini, and Diane Schanzenbach. 2021. "An Update on the Effect of Pandemic EBT on Measures of Food Hardship." Blog. The Hamilton Project at the Brookings Institution. Washington, D.C. September 29, 2021.
- Bee, Adam, Charles Hokayem, and Daniel Lin. 2021. "Imputing 2020 Economic Impact Payments in the 2021 CPS ASEC." Working Paper 2021-18. Social, Economic, and Housing Statistics Division, U.S. Census Bureau, Washington, D.C.
- Bedrick, Elizabeth, and Sarah Daily. 2020. "States Are Using the CARES Act to Improve Child Care Access during COVID-19." Child Trends, Bethesda, MD.
- Brannen, Julia, and Rebecca O'Connell. "Experiences of Food Poverty among Undocumented Parents with Children in Three European Countries: A Multi-Level Research Strategy." Humanities and Social Sciences Communications 9, no. 1 (February 2, 2022): 1–9.
- Brown, David W., Amanda E. Kowalski, and Ithai Z, Lurie. 2019. "Long-Term Impacts of Childhood Medicaid Expansions on Outcomes in Adulthood." *The Review of Economic Studies* 87(2): 792–821.
- Brown, Jessica, and Chris M. Herbst. 2021. "Child Care over the Business Cycle." IZA Institute of Economics Discussion Paper 14048. IZA Institute of Economics, Bonn, Germany.
- Bublitz, Melissa G., Natalie Czarkowski, Jonathan Hansen, Laura A. Peracchio, and Sherrie Tussler. 2020. "Pandemic Reveals Vulnerabilities in Food Access: Confronting Hunger amidst a Crisis." *Journal of Public Policy and Marketing* 40(1): 105–07.
- Bureau of Labor Statistics. 2002. "The Employment Situation—January 2022." Bureau of Labor Statistics, Washington, D.C. February 4, 2022.
- Burton-Jeangros, Claudine, Aline Duvoisin, Sarah Lachat, Liala Consoli, Julien Fakhoury, and Yves Jackson. 2020. "The Impact of the COVID-19 Pandemic and the Lockdown on the Health and Living Conditions of Undocumented Migrants and Migrants Undergoing Legal Status Regularization." *Frontiers in Public Health* 8:596887.
- Carminucci, Joanne, Sarah Hodgman, Jordan Rickles, and Mike Garet. 2021. "National Survey of Public Education's Response to COVID-19: Student Attendance and Enrollment Loss in 2020–21." American Institutes for Research, Arlington, VA.
- Cascio, Elizabeth U. 2021. "COVID-19, Early Care and Education, and Child Development." Working Paper. Dartmouth College, Hanover, NH.
- Case, Anne, Darren Lubotsky, and Christina Paxson. 2002. "Economic Status and Health in Childhood: The Origins of the Gradient." *American Economic Review 92*(5): 1308–34.

- Center on Budget and Policy Priorities. 2021. "States Are Using Much-Needed Temporary Flexibility in SNAP to Respond to COVID-19 Challenges." Center on Budget and Policy Priorities, Washington, D.C.
- Centers for Medicare and Medicaid Services. 2021. "Final Marketplace Special Enrollment Period Report." Centers for Medicare and Medicaid Services, Woodlawn, MD.
- Centers for Medicare and Medicaid Services. 2022. "Marketplace 2022 Open Enrollment Period Report: Final National Snapshot." Centers for Medicare and Medicaid Services, Woodlawn, MD.
- Cohen, Robin A., Michael E. Martinez, Amy E. Cha, and Emily P. Terlizzi. 2021. "Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, January–June 2021." Nation Center for Health Statistics, National Health Interview Survey Release Program, Washington, D.C.
- Congressional Budget Office. 2021. "Reconciliation Recommendations of the House Committee on Ways and Means." Congressional Budget Office, Washington, D.C.
- Congressional Research Service. 2021. "Impact of the Recession on Medicaid." Congressional Research Service, Washington, D.C.
- Cooney, Patrick, and Luke Shaefer. 2021. "Material Hardship and Mental Health Following the COVID-19 Relief Bill and American Rescue Plan Act." University of Michigan's Poverty Solutions, Ann Arbor, MI.
- Cowin, Rebecca, Hal Martin, and Clare Stevens. 2020. "Measuring Evictions during the COVID-19 Crisis." Community Development Briefs. July 17, 2020.
- Currie, Janet, and Jonathan Gruber. 1996. "Health Insurance Eligibility, Utilization of Medical Care, and Child Health." *The Quarterly Journal of Economics 111*(2): 431–66.
- Dean, Stacy, Crystal Fitzsimons, Zoë Neuberger, Dottie Rosenbaum, and Etienne Melcher Philbin. 2020. "Lessons from Early Implementation of Pandemic-EBT." Center on Budget and Policy Priorities, Washington, D.C.
- Department of the Treasury. 2021. "Paycheck Protection Program Loans: Frequently Asked Questions." Department of the Treasury, Washington, D.C.
- Fox, Liana E., and Kalee Burns. 2021. "The Supplemental Poverty Measure: 2020." U.S. Census Bureau, Suitland, MD.
- Furman, Jason, Melissa S. Kearney, and Wilson Powell. 2021. "The Role of Childcare Challenges in the U.S. Jobs Market Recovery during the COVID-19 Pandemic." Working Paper 28934. National Bureau of Economic Research, Cambridge, MA.
- Garcia, Kairon S. D., and Benjamin W. Cowan. 2022. "The Impact of School and Childcare Closures on Labor Market Outcomes during the COVID-19 Pandemic." Working Paper 29641. National Bureau of Economic Research, Cambridge, MA.
- Gascon, Charles S., and Devin Werner. 2022. "Pandemic, Rising Costs Challenge Child Care Industry." Federal Reserve Bank of St. Louis, St. Louis, MO.

- Gluckman, Peter, and Mark Hanson. 2005. *The Fetal Matrix: Evolution, Development and Disease*. Cambridge, MA: Cambridge University Press.
- Gordon, Nora E. 2016. "Increasing Targeting, Flexibility, and Transparency in Title I of the Elementary and Secondary Education Act to Help Disadvantaged Students." Policy Proposal 2016-01. The Hamilton Project, Brookings Institution, Washington, D.C.
- Gordon, Nora E., and Sarah J. Reber. 2021. "Were Federal COVID Relief Funds for Schools Enough?" Working Paper 28934. National Bureau of Economic Research, Cambridge, MA.
- Gould, Elise, and Hunter Blair. 2020. "Who's Paying Now? The Explicit and Implicit Costs of the Current Early Care and Education System." Economic Policy Institute, Washington, D.C.
- Halloran, Clare, Rebecca Jack, James C. Okun, and Emily Oster. 2021. "Pandemic Schooling Mode and Student Test Scores: Evidence from U.S. States." Working Paper 29497. National Bureau of Economic Research, Cambridge, MA.
- Han, Jeehoon, Bruce D. Meyer, and James X. Sullivan. 2020. "Income and Poverty in the COVID-19 Pandemic." *Brookings Papers on Economic Activity* (Summer), Washington, D.C.
- Hansen, Benjamin, Joseph J. Sabia, and Jessamyn Schaller. 2022. "Schools, Job Flexibility, and Married Women's Labor Supply: Evidence from the COVID-19 Pandemic." Working Paper 29660. National Bureau of Economic Research, Cambridge, MA.
- Health Resources and Services Administration. 2021. "Household Pulse Survey: Child Care Disruptions." Health Resources and Services Administration, Washington, D.C.
- Hendren, Nathaniel, and Ben Sprung-Keyser. 2020. "A Unified Welfare Analysis of Government Policies." *Quarterly Journal of Economics* 135(3): 1209–1318.
- Hodges, Leslie, Jordan W. Jones, and Saied Toossi. 2022. "Coronavirus (COVID-19) Pandemic Transformed the U.S. Federal Food and Nutrition Assistance Landscape." U.S. Department of Agriculture, Washington, D.C.
- Holahan, John, and Vicki Chen. 2011. "Changes in Health Insurance Coverage in the Great Recession, 2007–2010." The Urban Institute, Washington, D.C.
- Hoynes, Hilary, Diane W. Schanzenbach, and Douglas Almond. 2016. "Long-Run Impacts of Childhood Access to the Safety Net." *American Economic Review 106*(4): 903–34.
- Hoynes, Hilary W., and Diane Whitmore Schanzenbach. "U.S. Food and Nutrition Programs." *Economics of Means-Tested Transfer Programs in the United States, Volume 1.* Robert A Moffit, editor. National Bureau of Economic Research, March 2015.
- Hudson, Julie L., and Asako S. Moriya. 2017. "Medicaid Expansion For Adults Had Measurable 'Welcome Mat' Effects On Their Children." Health Affairs 36(9): 1643–51.

- Jackson, C. Kirabo, Cora Wigger, and Heyu Xiong. 2021. "Do School Spending Cuts Matter? Evidence from the Great Recession." *American Economic Journal: Economic Policy* 13(2): 304–35.
- Jackson, C. Kirabo, Rucker C. Johnson, and Claudia Persico. 2016. "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms." *The Quarterly Journal of Economics* 131(1): 157–218.
- Lafortune, Julien, Jesse Rothstein, and Diane Whitmore Schanzenbach. 2018.
 "School Finance Reform and the Distribution of Student Achievement." *American Economic Journal: Applied Economics* 10(2): 1–26.
- Leachman, Michael, Kathleen Masterson, and Eric Figueroa. 2017. "A Punishing Decade for School Funding." Center on Budget and Policy Priorities, Washington, D.C.
- Lewis, Karyn, Megan Kuhfeld, Erik Ruzek, and Andrew McEachin. 2021. "Learning during COVID-19: Reading and Math Achievement in the 2020–21 School Year." Center for School and Student Progress, Portland, OR.
- Moffitt, Robert A. 2013. "The Great Recession and the Social Safety Net." *The Annals of the American Academy of Political and Social Science* 650(1): 143–66.
- National Association for the Education of Young Children. 2020. "Child Care in Crisis Understanding the Effects of the Coronavirus Pandemic." National Association for the Education of Young Children, Washington, D.C.
- National Academies of Sciences, Engineering, and Medicine. 2019. *A Roadmap to Reducing Child Poverty*. Washington, D.C: The National Academies Press.
- National Conference of State Legislatures. 2022. "Elementary and Secondary School Emergency Relief Fund Tracker." National Conference of State Legislatures, Washington, D.C.
- National Head Start Association. 2020. "Head Start in the Covid-19 Era: Standing Strong Despite Challenging Times." National Head Start Association, Washington, D.C.
- National Public Radio. 2021. "Experiences of U.S. Households with Children during the Delta Variant Outbreak." National Public Radio, Washington, D.C.
- Nord, Mark, and Mark Prell. 2011. "Food Security Improved following the 2009 ARRA Increase in SNAP Benefits." U.S. Department of Agriculture, Washington, D.C.
- Oreopolous, Philip, Marianne Page, and Ann H. Stevens. 2005. "The Intergenerational Effects of Worker Displacement." Working Paper 11587. National Bureau of Economic Research, Cambridge, MA.
- Pelto, Debra J., Alex Ocampo, Olga Garduño-Ortega, Claudia Teresa Barraza López, Francesca Macaluso, Julia Ramirez, Javier González, and Francesca Gany. 2020. "The Nutrition Benefits Participation Gap: Barriers to Uptake of SNAP and WIC among Latinx American Immigrant Families." *Journal of Community Health* 45: 488–91.
- Pennsylvania Department of Human Services. 2022. "SNAP-CARES Act." Accessed March 4, 2022.

- Perez-Lopez, Daniel J. 2021. "Household Pulse Survey Collected Responses Just Before and Just After the Arrival of the First CTC Checks." U.S. Census Bureau, August 11, 2021.
- Rabbitt, Matthew, Michael D. Smith, Alisha Coleman-Jensen. 2016. "Food Security Among Hispanic Adults in the United States, 2011-2014." Economic Research Service, U.S. Department of Agriculture, Washington, D.C.
- Raifman, Julia, Jacob Bor, and Atheendar Venkataramani. 2020. "Unemployment Insurance and Food Insecurity among People Who Lost Employment in the Wake of COVID-19." *National Institutes of Health* preprint.
- Rothstein, Jesse, Diane Whitmore Schanzenbach. 2021. "Does Money Still Matter? Attainment and Earnings Effects of Post-1990 School Finance Reforms." Working Paper 29177. National Bureau of Economic Research, Cambridge, MA.
- Ruhter, Joel, Ann Conmy, Rose C. Chu, Christie Peters, Nancy De Lew, and Benjamin D. Sommers. 2021. "Tracking Health Insurance Coverage in 2020–2021." Assistant Secretary for Planning and Evaluation, Washington, D.C. October.
- Skopec Laura, John Holahan, and Caroline Elmendorf. 2018. "Changes in Health Insurance Coverage 2013–2016: Medicaid Expansion States Lead the Way." Urban Institute, Washington, D.C.
- Smith, Linda, Kathlyn McHenry, Manami Suenaga, and Colby Thornton. 2021. "Child Care, Essential to Economic Recovery, Received Just \$2.3 Billion in PPP Funds during 2020." Bipartisan Policy Center, Washington, D.C.
- Tedeschi, Ernie. 2020. "COVID-19, School Closures, and U.S. Parental Labor Outcomes." Working Paper.
- U.S. Department of Agriculture. 2021. "Supplemental Nutrition Assistance Program (SNAP): Updated Emergency Allotments (EA) Guidance: Questions and Answers." U.S. Department of Agriculture, Washington D.C.
- U.S. Department of Education. 2009. "American Recovery and Reinvestment Act Report: Summary of Programs and State-by-State Data." U.S. Department of Education, Washington, D.C.
- U.S. Department of Education. 2009. "Fiscal Year 2010 Budget Summary: May 7, 2009." U.S. Department of Education, Washington, D.C.
- West, Martin R., and Robin Lake. 2021. "How Much Have Students Missed Academically Because of the Pandemic? A Review of the Evidence to Date." Center on Reinventing Public Education, Seattle, WA.
- Wheaton, Laura, Linda Giannarelli, and Ilham Dehry. 2021. "2021 Poverty Projections Assessing the Impact of Benefits and Stimulus Measures." Urban Institute, Washington, D.C.

The COVID-19 pandemic posed an extraordinary threat to lives and livelihoods. In the United States, the pandemic triggered a sharp downturn. Yet, the ensuing economic recovery was faster and stronger than nearly any forecaster anticipated due in part to the swift, aggressive, sustained, and creative response of U.S. fiscal and monetary policy. But when the next recession arrives, it most likely won't be triggered by a pandemic.

Recession Remedies examines and evaluates the breadth of the economic-policy response to COVID-19. Chapters address Unemployment Insurance, Economic Impact Payments, Ioans and grants to businesses, assistance to renters and mortgage holders, aid to state and local governments, policies that targeted children, Federal Reserve policy, and the use of nontraditional data to monitor the economy and guide policy. These chapters provide evidence and lessons to apply to the next recession.

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