RESEARCH REPORT

Quantifying the Costs of Rising Unemployment

Joe Peck

NOVEMBER 2023





WorkRise connects workers, employers, researchers and advocates to generate ideas that can be turned into policies and practices that bring economic stability and upward mobility for all US workers opening new opportunities for workers to thrive at work and in life.

Copyright © November 2023. WorkRise, a project of the Urban Institute. Permission is granted to reproduce this file with attribution to WorkRise.

Contents

Acknowledgments	iv
Quantifying the Costs of Rising Unemployment	1
Workers, Wages, and Workplaces	2
Households, Families, and Communities	7
Broader Economic Impacts	12
Implications for Policymakers, Practitioners, and Employers	15
Notes	20
References	22
About the Authors	29
Statement of Independence	30

Acknowledgments

This report was funded by WorkRise, a research-to-action network hosted by Urban Institute and supported by a multi-funder collaborative. Our philanthropic supporters make it possible for WorkRise and Urban to advance their shared missions of bringing high-quality evidence to changemakers with the power to transform economic opportunity for all.

The views expressed are those of the author and should not be attributed to WorkRise, the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

Quantifying the Costs of Rising Unemployment

There are significant costs to rising unemployment. For workers, particularly those being paid low wages, higher unemployment rates nationally are associated with worse employment prospects, health outcomes, and general well-being.

In 2020, these dynamics played out rapidly. The COVID-19 pandemic brought a massive shock to the labor market and the unemployment rate climbed from 3.5 percent, a low level not seen since the 1960s, to 14.7 percent.¹ By July 2022, 28 months after the start of the crisis, sizable public investments helped foster a remarkably rapid turnaround and bring the unemployment rate back to its prepandemic level. The speedy recovery of the US economy, in contrast to the slow rebound after the Great Recession, minimized many of the severe problems of sustained high unemployment.

By understanding the dynamics of high unemployment, policymakers, practitioners, and employers can work to alleviate its detrimental consequences. This report summarizes existing research on the effects of rising unemployment on three different areas: first, on workers, their workplaces, remuneration, and job quality; second, on the social factors that are indirectly affected by rising unemployment, such as enrollment in education, health outcomes, crime rates, and family well-being, particularly for low-income workers; and third, on the wider economic effects of unemployment on social spending, productivity, national income, and future unemployment rates.

One strand of research explores the impact of long-term employment on factors such as income, labor market attachment, and health (Nichols, Mitchell, and Lindner 2013). This paper aims to frame the parameters of a different but complementary research area: the impacts of rising unemployment at large, both in the short and medium term. The contemporary labor market is unusually tight and provides a prime opportunity for researchers to better understand the benefits of low unemployment as well as the risks of rising unemployment. This report serves as a first step in that process and as a potential foundation for future research. Ultimately, by quantifying the costs of rising unemployment, this report invites policymakers, practitioners, and employers to consider the significant consequences of rising rates of joblessness—particularly when evaluating policies that would encourage those outcomes—and formulate more effective strategies to curb rising unemployment such that mobility for low-wage workers can be protected.

Workers, Wages, and Workplaces

Fundamentally, the question of unemployment is a question of work. It follows that the most immediate and obvious impacts of rising unemployment concern wages —both the incomes of people who have lost jobs and the wages of workers who retain them—and employer-provided benefits and scheduling practices. Moreover, rising unemployment can damage individuals' employment prospects years after overall unemployment has subsided.

Unemployment Scarring

The impact of high unemployment on future employment and wages can be severe and long-lasting, particularly for Black workers. If a worker loses their job, the harm of such an event to their livelihood is more severe during periods of high aggregate unemployment. Research indicates that when mass layoff events occur—defined as at least 30 percent of the workforce losing their jobs—men lose 1.4 years of their pre-displacement earnings over the succeeding 20-year period if the unemployment rate is below 6 percent. If the national unemployment rate is above 8 percent, however, this nearly doubles to 2.4 years of lost earnings over the same period (Davis and von Wachter 2011).

Economic shocks can be self-iterating. Higher unemployment can lead to more unemployment—a kind of macroeconomic hysteresis (Blanchard and Summers 1986). Workers who retain their jobs acquire greater influence within their positions than those who lose them, in part because of the costs associated with labor turnover, putting downward pressure on the likelihood of re-employment for the unemployed (Lindbeck and Snower 2001).

This phenomenon is particularly acute for Black workers. Black Americans regain employment at a much slower rate than white workers (Yu and Sun 2019), and Black women in particular have the hardest time finding employment when they have a history of unemployment (Pedulla 2015). Rising unemployment can have a lasting effect on both future employment and labor market equity, which in turn serves to reinforce economic and social inequalities.

Relatedly, Black Americans are more likely than white workers to be permanently displaced from the labor market after being laid off—a regressive pattern that has only worsened in recent decades. Since the 1990s, the rate at which Black women become permanently displaced from a job has doubled, and for Black men, the rate has tripled (Wrigley-Field and Seltzer 2020). For Black workers, the costs of rising unemployment are particularly harsh.

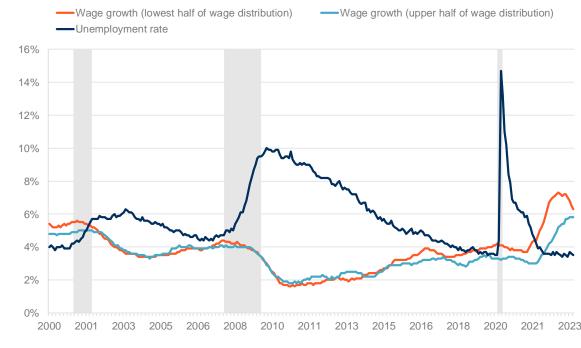
Wages

Wages tend to rise at a slower rate when unemployment is higher. Conversely, when the labor market is running more efficiently and unemployment is low, wages tend to grow faster (Phillips 1958).² In part, this is because during periods of low unemployment, employers tend to offer more generous compensation packages since they are competing with one another for employees.

In other words, when labor demand increases relative to labor supply, wages rise. Though this relationship has both strengthened and weakened over time, the general principle remains an effective lens through which to analyze the risks of high unemployment, particularly for the most vulnerable workers.

FIGURE 1

Wages Grow Faster When Unemployment Is Lower 12-month moving averages of monthly median wage growth, alongside the unemployment rate



URBAN INSTITUTE

Source: Current Population Survey, Bureau of Labor Statistics, and Federal Reserve Bank of Atlanta calculations, available at http://www.frbatlanta/chcs/wage-growth-tracker.

High unemployment is particularly harmful for workers earning low wages. Measuring the relationship between the unemployment rate and wage growth between 1979 and 2013, Eubanks and Wiczer (2015) find that workers earning at the 10th or 25th wage percentiles were much more likely to see their earnings fall during a period of high unemployment than workers earning higher wages. Workers with the lowest incomes are less likely to be able to switch between jobs and have fewer alternatives than higher-paid earners, whose incomes likely reflect vocational and academic qualifications that are more attractive to employers. The bargaining power of low earners, conversely, is more heavily determined by labor market conditions—namely, the availability of other workers (as reflected in the unemployment rate).

New workers are also particularly vulnerable during periods of high unemployment. High unemployment has a large and long-lasting negative impact on the wages of recent graduates (Kahn 2010). Von Wachter (2020), for example, finds that a 4 to 5 percent increase in the unemployment rate (as would be expected in a typical recession) leads to a 10 to 15 percent drop in initial earnings for workers newly entering the labor force (von Wachter 2020). This effect is strongest for workers with a high school degree and slightly weaker for those with a college degree. This effect also has implications for racial equity in the labor market, as increases in the unemployment rate can lead to a substantial reduction in the earnings of nonwhite workers (von Wachter 2020).

Though six and a half decades of economic research has found flaws or proposed caveats to Philips's theory,³ its central argument remains a pillar of contemporary economic understanding. There is, for example, recent evidence that the relationship between unemployment and wage inflation is stronger than that between unemployment and price inflation.⁴ Recent research has also found that relatively higher local unemployment rates lead to reduced wages. Yagan (2019) finds that a 1 percent unemployment shock within a commuting zone resulted in a 3.6 percent negative impact on 2015 wage and contractor earnings.

Job Quality

Rising unemployment often leads to a deterioration in good employer scheduling practices. Low-wage workers are concentrated in service industries, where scheduling often relies on predictions of consumer traffic. This practice of "just-in-time" scheduling is highly variable, does not respect hourly workers' autonomy, and does not provide dependable wages (Cauthen 2011; Schneider and Harknett 2019). These forecasts are also more volatile during periods of economic slowdown and high unemployment, when consumer spending on goods and services becomes more haphazard and less consistent (Bloom 2014; Finnigan 2018).⁵ Increasing state-level unemployment rates are therefore harbingers of more volatile scheduling practices and greater economic insecurity for workers.

However, this impact should not be overstated. As unemployment rises, changes in scheduling practices are not as rapid as changes in wages. This is more because scheduling practices do not improve much as the labor market tightens, rather than because the standard of scheduling practices deteriorates when it loosens (Zundl et al. 2022). Employers benefit from just-in-time scheduling practices such that they are reluctant to abandon them, even as workers gain power (Newman and Jacobs 2023).

Employers offer more scant benefits packages when unemployment is higher. When unemployment is low, employers not only increase wages but improve the quality of the jobs they offer, such as by offering more managerial responsibility to workers or offering more reputable health insurance plans to their employees. As unemployment rises, however, some of these gains may be lost. As an example, employers are least likely to invest in on-the-job training programs while the economy is in a downturn (Newman and Jacobs 2023).

Given that two-thirds of Americans receive health insurance through their employer (Keisler-Starkey and Bunch 2021), it is little surprise that health insurance coverage falls as unemployment rises. This effect is more profound than a simple one-to-one loss of a job leading to a loss of insurance. Evidence from the Great Recession suggests that a 1 percent increase in the unemployment rate is associated with a 2.12 percent reduction in the probability that men will have health insurance (the effect is similar, though not significant, for women and children). Per this analysis, 9.3 million Americans lost health insurance as unemployment rose between 2007 and 2009 (Cawley, Moriya, and Simon 2011).

The falling insurance rate brings further costs both to individuals and the institutions designed to support individuals' health. Uninsured Americans are much more likely to end up in the hospital with avoidable conditions and face generally poorer health outcomes in the long run (Kozak, Hall, and Owings 2001; Hadley 2003), and Black Americans are already more likely to be uninsured than their white peers (Taylor 2019). Given that Black Americans are more likely both to lose work and be kept out of employment (Yu and Sun 2019; Wrigley-Field and Seltzer 2020), the connection between unemployment and a lack of health insurance serves to further reinforce racial inequity in health outcomes.

Although employer provision of health insurance decreases overall during periods of high unemployment, state-level or federal policies such as unemployment insurance can induce employers to strengthen their benefits offerings. In states with stronger unemployment insurance programs, employers are more likely to offer health insurance benefits to make employment more attractive (Tsolmon and Ariely 2022). This effect is particularly strong when those firms rely on specialized workers who might be harder to find. Evidence from the 2001 and 2008 recessions also shows that when states offer unemployment insurance for longer periods, wages and job quality both improve (Farooq, Kugler, and Muratori 2022). Although rising unemployment can have a negative effect on job quality overall, this effect demonstrates how social safety net policies can both protect jobseekers and provide workers with the freedom to be more selective in what jobs they apply for and ultimately accept.

Households, Families, and Communities

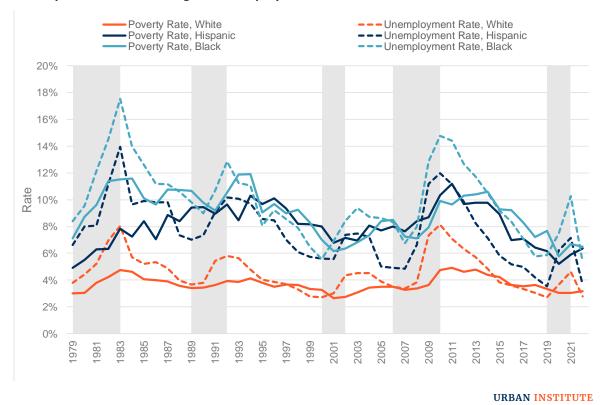
Beyond employment and wages, rising unemployment has a profound effect on the pervasiveness of poverty, crime, poor mental health, and financial strain within households. These are all substantial and harmful secondary effects that policymakers, employers, and practitioners must consider when evaluating how best to tackle rising unemployment—an issue with consequences further reaching than just economic.

Poverty Rates

According to previous economic principles, poverty in the United States should have fallen since the 1960s.⁶ Increases in cash-based and in-kind welfare spending, the female labor force participation rate, and education levels across the board should all have contributed to the poverty rate falling over the last 50 years, but it has remained stable (Hoynes, Page, and Stevens 2006). This is partially explained by the failure of policies to respond to evolving family structures—most of all the increase in single-mother households—which has put upward pressure on the poverty rate (Creamer et al. 2022; Hoynes, Page, and Stevens 2006). To a lesser but nonetheless significant extent, increases in the unemployment rate can also put upward pressure on the poverty rate. By some estimates, increasing the unemployment rate by 1 percentage point leads to a 0.4 to 0.7 percentage point increase in the poverty rate (Hoynes, Page, and Stevens 2006). The 1960s saw a significant reduction in both unemployment and poverty nationally, while the recession in the 1980s saw a significant increase in both (Card 1991).⁷

FIGURE 2

Poverty Rises and Falls Alongside Unemployment



Source: Current Population Survey data: IPUMS-CPS, University of Minnesota, www.ipums.org. Note: Author's own analysis.

Individual Health and Well-Being

Rising unemployment is not simply an economic issue but a matter of public health. Being unemployed or underemployed is associated with higher levels of depression and anxiety (Lee et al. 2021). This connection is most intense among Hispanic workers, a group that already faces a disproportionately high level of employment in low-quality jobs.⁸ Evidence suggests that the relationship between unemployment and poor health is causal and made all the worse by the fact that unemployed people are less likely to have health insurance than employed Americans (Athar et al. 2013). This harmful mix of factors contributes to increased mid-life mortality among those who are unable to find work (Case and Deaton 2015).

More research is needed in the United States on the overall public health impacts of a high unemployment rate (Pratap et al. 2021), though individual-level findings suggest that

rising unemployment likely significantly and negatively affects public health. Research into different subsets of the working population offers researchers further clues. Higher unemployment among young workers is a contributing factor to the group's higher incidence of depression (McGee and Thompson 2015). Similarly, the stress of high unemployment has a particularly acute effect on Black Americans, who face a higher unemployment rate than white, Hispanic, and Asian American workers. This effect is significant even after controlling for other demographic and social factors (Lo and Cheng 2014).

Along the same lines, evidence from Sweden finds that rising unemployment has a statistically significant impact on the mental health of *employed* women and young people, though not of employed men (Novo, Hammarström, and Janlert 2001). Even beyond those most affected—individuals who lose work—the impact of job loss on mental health can be passed down to the children within these households (McClelland 2000).

Educational Enrollment

Although it is hard to objectively identify a cost of unemployment within the education system, it is nevertheless true that rising unemployment has a profound impact on both the rates at which people apply for courses and which subjects they apply for. During the Great Recession, swelling unemployment drove increases in college education as opportunities in the labor market dried up and federal stimuli, such as expansions to the federal Pell Grant Program, made college more affordable (Barr and Turner 2013). Research suggests that over time, a 1 percentage point increase in unemployment leads to a 1.1 to 3.3 percent increase in demand in community college admissions. This demand increases more for full-time than part-time enrollment (Hillman and Orians 2013).

Racial differences persist in educational enrollment across the business cycle. Hispanic and Black Americans are more likely than non–Black and non–Hispanic Americans to enroll in a two–year college during periods of high unemployment (Smythe 2019). This means that both groups are more sensitive to labor market conditions than other would–be students whose enrollment rates are more consistent over time. Crucially, the variable enrollment of Black and Hispanic Americans may explain in part why both groups have lower rates of college enrollment overall (Smythe 2019). Unemployment shocks also affect the types of subjects students pursue. More research is needed to discern the impacts of state and national increases in unemployment, but local area unemployment shocks—for example, a factory closing—encourage students to shift their focus of study to something unrelated to the affected industry (Acton 2020). Research on local unemployment rates shows that the opportunity cost of schooling lessens as jobs in a local community disappear, so more people may choose to pursue additional education (Betts and McFarland 1995; Rees and Mocan 1997; von Simson 2015; Foote and Grosz 2020). A declining local economy may also incentivize students to pursue additional schooling in the hopes of finding better jobs outside their community (Tieken 2016).

Family Well-Being

Unemployment affects workers and their families alike. When individuals become unemployed, they are twice as likely to move in with family and friends. This effect is more pronounced among people with less than a high school degree (Wiemers 2014). Single parents are also more likely to move in with others during periods of higher unemployment—a so-called "doubling up" effect, which serves to reduce the housing cost burden on the single-parent family. During the 2008 economic crisis, when the unemployment rate rose from 5 to 9 percent, the number of multifamily households increased by 1.6 million (Wiemers 2014).

There are also signs that higher unemployment contributes to marital dissolution (London and Fairlie 2005). Research suggests that the divorce rate doubles among men who experience a period of joblessness, although there is mixed evidence that the same applies to women (White and Rogers 2000).

Job loss in a family often causes instability. Unemployment can have a destabilizing effect on children beyond that caused by a lack of economic resources (Lindner and Peters 2014; Sandstrom and Huerta 2013). Again, these effects are most acute among individuals without a high school degree (Lindner and Peters 2014). Troublingly, this instability can harm children's cognitive development and, relatedly, damage their future employment prospects (McClelland 2000).

Because people of color suffer face a higher risk of joblessness and poorer employment prospects than white people, their respective levels of employment-related stress tends to

be higher. Coupled with racism-induced stress, these heightened concerns can have harmful and long-term impacts on children's physical and mental well-being.⁹

Crime

Evidence suggests that deteriorating economic conditions spur an increase in criminal activity (Cantor and Land 1985). During sustained periods of high unemployment, incidents of burglary, larceny, and motor vehicle theft increase the most (Phillips and Land 2012). The increase in nonviolent crime is consistent with the changing incentives during times of economic hardship. As people become economically desperate and legal means of earnings dry up, they may resort to illegal means. This might explain why property crime increases significantly alongside unemployment while violent crimes do not (Raphael and Winter-Ebmer 2001; Edmark 2005).

Research situated outside the United States supports these findings. Evidence from Sweden finds that crime rises alongside unemployment (Öster and Agell 2007), just as, in the United Kingdom and France, higher unemployment causes an increase in nonviolent crime (Jawadi et al. 2021). As with the relationship between rising unemployment and deteriorating mental health, this increase in criminal activity is most acute among young people, who generally have the highest rates of unemployment. Further research in France finds that rising *youth* unemployment has a significant impact on property crime, even when unemployment generally does not (Fougère et al. 2009), though this conclusion is not comprehensive (Öster and Agell 2007).

The strength and existence of the connection between high unemployment and crime change based on geography and time, in part because slowed economic production and more people watching over common targets (such as homes) lower the incentives for crime during these periods (Malby and Davis 2012). Contemporaneous unemployment can actually reduce crime in the short term, but not because the incentives are not there. Rather, as unemployed people spend more time at home and spend less money on high-value items, the opportunities available to would-be criminals diminish (Cantor and Land 1985).

Broader Economic Impacts

Safety Net Spending

Evidence suggests that as unemployment rises, so does government spending on social safety net programs, such as the Supplemental Nutrition Assistance Program (SNAP) (Lunsford 2021), Medicaid (Freinier, Nikpay, and Golberstein 2020), Medicare (Levine and Buntin 2013), Temporary Assistance for Needy Families (TANF), and energy assistance (Irving 2011). Most immediately and expectedly, unemployment insurance rises during times of recession. Between 2007 and 2012, when the average annual unemployment rose from 4.6 percent to a peak of 9.6 percent in 2010, the cost of unemployment insurance benefits rose from \$33 billion to \$94 billion (Kroft and Notowidigdo 2011). Research also finds that a 1 percent increase in the unemployment rate leads to a 1 to 2 percent decrease in the probability that someone will establish a renter household (Lee and Painter 2013) and increases the likelihood that an individual will apply for Supplemental Security Income or disability benefits from 30 to 36 percent (Nichols, Schmidt, and Sevak 2017). These programs are an important part of the social safety net, safeguarding jobless individuals from the burdens of poverty while spurring a wider economic recovery. However, they are largely unable to provide the level of financial security or economic mobility that would be afforded by full-time employment.

These increases in expenditure are not a wholly bad thing, and social safety net programs often increase gross domestic product (GDP). More than other types of government expenditure (such as tax cuts), unemployment insurance has a high fiscal multiplier (Shaw and Stone 2010). For every extra dollar of unemployment insurance expenditure, the national income increases by \$1.90 (Di Maggio and Kermani 2016). The problem is that the US social safety net is generally a less effective method for fostering economic mobility than employment, not least because public spending is often inadequate given its purpose (Loprest and Nightingale 2018). For example, in its current form, TANF is not wholly responsive to all individuals' economic needs (Pavetti 2014). Similarly, as unemployment rises, increases in Medicaid enrollment typically lag behind the uptake of SNAP and unemployment insurance as people prioritize immediate needs, such as buying food and paying for rent (Broaddus 2020). These trade-offs, combined with the unresponsiveness of program designs, mean that government social expenditure is not a robust mechanism through which people can be protected from economic hardship. Often, the inefficiency of social safety net programs and the lingering damage of unemployment hysteresis means that, for many, the road to economic security can be a hard one. After the recession peaks of 1992, 2003, and 2010, falling usage of SNAP lagged behind falling unemployment and the labor market remained damaged by these periods of high unemployment (Fitzgerald et al. 2012; Stone, Sherman, and Keith-Jennings 2015).

Future Local Employment Rates

This macroeconomic hysteresis in unemployment was evidenced in the fallout from the Great Recession. Even though the unemployment rate slowly recovered between October 2009 and February 2020, the employment-to-population ratio remained weak as people stayed out of the labor force. Research finds that exposure to a 1 percent higher unemployment shock within a commuting zone during the 2007–2009 period led to a 0.39 percent reduction in the employment rate in 2015 (Yagan 2019). This effect was felt most markedly by older and lower-wage workers. Although this conclusion is not universally supported (Blanchard and Katz 1992), there is evidence that negative employment shocks damage future local area unemployment (Autor and Duggan 2003). Usually, this leads to a larger negative effect on nonemployment as well as unemployment.

Productivity

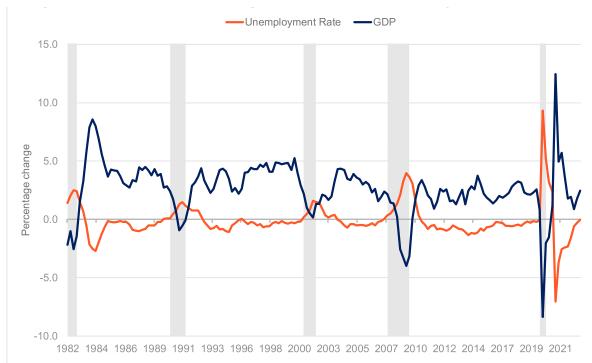
Some research finds that while unemployment does not directly affect productivity, it can negatively affect human capital, which in turn negatively affects productivity (Bräuninger and Pannenberg 2000). However, this effect is not necessarily consistent across time. Other research suggests that positive increases in productivity are associated with increased unemployment by 0.02 percent in the short term and decreased unemployment by 2.23 percent in the long run (Rezai and Semmler 2007). In his research, Bivens (2014) discusses the impact of individuals' long-term unemployment on their productivity. In order to fully understand the risks associated with high unemployment nationally, more evidence is needed to determine the effect of unemployment on aggregate productivity as opposed to the effect of the latter on the former, which has been more fully researched.

GDP

As the costs of social safety net programs rise alongside unemployment, the annual governmental intake of funds shrinks. High unemployment is therefore doubly costly for the public purse.

Different signs of macroeconomic health usually appear alongside each other. Falling unemployment is usually associated with a rising gross domestic product (GDP) and rising industrial production (Labonte 2016). Conversely, rising unemployment reduces production and, according to Okun's law, when unemployment is above its natural rate, potential GDP is lost (Okun 1962). The inverse relationship between unemployment and GDP has remained consistent across time (Ball, Leigh, and Loungani 2013). Notably, this relationship held throughout the 1973, 1990, 2001, and 2007 recessions (Daly et al. 2014). The relationship is also consistent across geography, even though the magnitude of this effect can vary depending on the country in question (Ball, Leigh, and Loungani 2013).

FIGURE 3



Annual Percentage Change in GDP and Unemployment

URBAN INSTITUTE

Source: Federal Reserve Bank of St. Louis, fred.stlouisfed.org. **Note:** Author's own analysis. Recession indicators given by quarter.

Implications for Policymakers, Practitioners, and Employers

Monetary policymakers, such as those within the Federal Reserve, have a challenging dual mandate of reducing inflation and supporting employment. As the cost of borrowing declines, employers' demand for employees rises (Ball 2015). Conversely, as unemployment declines, wages increase, aggregate spending rises, and higher inflation can erode the gains made by workers.

Interest rate changes are a strong but blunt tool used to negotiate this tension. While extremely powerful in the medium term, interest rate changes take an average of 29 months to filter through the economy (Havraneka and Rusnak 2013) and cannot provide targeted support to the most vulnerable. Nevertheless, solutions exist to mediate this relationship and protect economic mobility for workers beyond the Federal Reserve. Policymakers, practitioners, and employers can limit the harms of high unemployment and, in some cases, reverse the trend of rising unemployment altogether.

Family-friendly policies improve life at home by reducing the negative consequences of high unemployment. This can encourage workers to persist with their job search until they find a high-quality match. Paid family leave policies—whether offered by employers or provided through social insurance programs—can boost labor force participation in the short term, particularly among women. Crucially, they can boost labor force attachment in the long run and increase employee retention (Jacobs 2018; Bartel et al. 2021), which could serve as important bulwarks against rising unemployment.

Expanding welfare programs such as unemployment insurance and TANF would similarly help accommodate the strains of job seeking and organizing family life (Lindner and Peters 2014). Financial support during economic downturns can give families the freedom they need to find a new job and make ends meet without preventing them from raising a child or leading a successful marriage. Similar programs could be expanded to cover the costs of other services, such as career counselling. This would also help abolish administrative burdens, such as work requirements, which create barriers to recipiency without significantly improving the labor force participation rate (Lindner and Peters 2014; Pavetti 2016).

One proposed iteration of a strengthened employment support model called the FAMILY Act would set up a federal program to collect small payroll taxes from workers and provide a system of progressive wage replacement for a specified number of weeks when an employee needs to take leave for personal reasons (Farrell and Glynn 2013).

Government financial support can increase labor force participation and lower unemployment by bolstering aggregate demand. Social policy expansions not only serve to protect the vulnerable during periods of high unemployment but can also work to reverse the trend in high unemployment altogether. The Earned Income Tax Credit (EITC), for example, encourages people who are out of work to find a job. Even among single mothers without a college degree—one of the most economically vulnerable groups—a \$1,000 increase in the EITC causes a 7.4 percent increase in employment and an 8.4 percent decrease in the number of people living in poverty (Hoynes and Patel 2015).

Along the same lines, there has been a flurry of recent debate over the merits of a guaranteed basic income. Where nonconditional cash transfers have been tested, such as with the Economic Empowerment Demonstration initiative in Stockton, California, \$500 monthly payments actually increased employment rates (West et al. 2021). A trial in Finland similarly found that individuals afforded a universal basic income were more likely to find employment than those on unemployment benefits (Ylikännö and Kangas 2021). The no-strings-attached payment allowed people to work in low-wage jobs or try part-time work that might have made them ineligible for unemployment benefits.

Another policy method to encourage people back to work is to fix the problem of benefit cliffs.¹⁰ Potential workers should not be forced into a binary choice between a higher income through unemployment insurance and lower income through employment. Instead, government programs need to "smooth out" these cliffs to ensure they function as designed: offering temporary social support during bad economic times and encouraging people back to work during better times.

Unemployment insurance should be more responsive and fitting to its intended purpose. The expansion of unemployment insurance during the pandemic protected millions of workers from financial ruin and helped America's workforce return to the tight labor market conditions we see today. Federal Pandemic Unemployment Compensation increased the amount of money available to unemployed workers, and Pandemic Unemployment Assistance covered workers such as full-time caregivers and selfemployed, part-time, and gig workers who would not otherwise be eligible for assistance (Congdon, Pyati, and Peck 2021a). These measures helped spur the economic recovery and had a minimal impact on labor supply in the United States.

In addition to making these expansions permanent, more work needs to be done to bring aid to vulnerable families faster. Policymakers should reform the current Extended Benefits system, designed to lengthen the administration of unemployment insurance when state unemployment rates remain too high. Currently, these triggers mean that unemployment insurance does not last long enough or provide adequate financial support (Congdon, Pyati, and Peck 2021b). Proposals exist to extend these benefits and ensure that more workers are protected (Chodorow-Reich and Coglianese 2019). Proposals for a "jobseeker's allowance," similarly designed to expand eligibility beyond that currently afforded by unemployment insurance, would also help reduce the impacts of high unemployment and accelerate the economic recovery (West et al. 2016).

Expanded unemployment insurance can also improve the quality of jobs, as unemployed workers are less pressured to resort to ill-fitting or poor-quality work, putting pressure on employers to make positions more desirable (Farooq, Kugler, and Muratori 2022).

A jobs guarantee is a more expansive policy proposal for protecting employment and aggregate demand. A report commissioned by the Center on Budget and Policy Priorities suggests the creation of a National Investment Employment Corps, which would be tasked with providing universal job coverage for Americans to help eradicate involuntary unemployment (Paul, Darity, and Hamilton 2018). Such a body would guarantee sufficiently high wages to ensure a reasonable standard of living and benefits such as health insurance (Paul, Darity, and Hamilton 2018).

In a similar vein, to help combat geographic variation in unemployment rates (and to help workers better prepare to avoid the hysteresis problem for local unemployment), systems of mobility banks—which finance workers to search for and move to new jobs—could ensure that workers have the autonomy they need to pursue new employment opportunities. Researchers at the Hamilton Project propose that such a bank would offer loans to jobseekers who are unable to find opportunities in their local areas (Ludwig and Raphael 2010).

Governments and employers must work together to train up the US workforce and help propel an economic upturn. When unemployment rises, employers are less likely to absorb the cost of training workers (Newman and Jacobs 2023). Government investments in training programs would increase the human capital of the workforce and ensure that workers with low incomes can take advantage of employment opportunities in good times and bad (Newman and Jacobs 2023). Evidence shows that employers also see a real return on investment from apprenticeship programs (Hollenbeck 2008; Lerman, Loprest, and Kuehn 2020; Reed et al. 2012).

Tax credits programs, such as that proposed in the Investing in American Workers Act of 2021,¹¹ risk subsidizing employers who would otherwise bear the cost of employee training programs. A solution to this problem might be to offer tax credits only in times of economic downturn. This way, the government could help spur employer workforce investment at exactly the time these programs tend to dry up (Newman and Jacobs 2023).

At present, most employment support programs only train workers for the most easily accessible job, without providing further education for better-paid and more secure employment thereafter (Eyster and Gebrekristos 2018). Furthermore, they do not enable long-term economic progress for workers who find employment in low-wage industries, as they do not sufficiently accommodate workers' movement into better-paying industries that offer a greater chance of upward mobility (Newman and Jacobs 2023). Current government training programs do not provide long-term training, which is often necessary to help displaced workers rejoin the workforce. Research at the Hamilton Project supports the need for a program to provide sizable grants and incentives for participants and institutions so more workers have access to long-term job training (Jacobson, LaLonde, and Sullivan 2011).

Workforce intermediaries and models such as sectoral employment workforce development strategies can better prepare workers and help them find better jobs when labor markets are tight (Commonwealth Corporation 2016). Policymakers and employers should learn the lessons of these programs to replicate their successes in times of high unemployment.

Employers and the government should provide more routes to employment and economic mobility for people without college degrees. Employers frequently underestimate the skillset of workers without college degrees. Research from WorkRise grantee Opportunity@Work shows that workers "skilled through alternative routes" are frequently displaced from industries (Debroy and Heck 2022). If employers reassessed the value workers bring through other experiences and training, many more workers without traditional educations could better find and retain jobs, raising employment and promoting economic mobility.

Despite the increased pressure on government budgets during an economic downturn, states should continue supporting educational initiatives as more students postpone working life and pursue learning. During the 2008 recession, reductions in state education spending alongside federal expansions to government support programs such as the Pell Grant meant that universities struggled to keep up with increased demand (Barr and Turner 2013). This pitfall should be avoided in future periods of high unemployment.

Notes

- ¹ "Unemployment Rate," Federal Reserve Bank of St. Louis, accessed November 3, 2023, https://fred.stlouisfed.org/series/UNRATE.
- ² Frederic Mishkin, Amir Sufi, and Peter Hooper, "The Phillips Curve: Dead or Alive," VoxEU Columns, October 23, 2019, https://cepr.org/voxeu/columns/phillips-curve-dead-or-alive.
- ³ Before the economic shocks caused by the COVID-19 pandemic, there was a growing chorus of academics declaring the death of the relationship between unemployment and wage inflation (Mishkin 2007; Powell 2018; Labonte 2016). After a brief reprieve post-2020, in which the relationship looked set to reestablish itself, more recent evidence suggests this may prove unlikely (Hobijn, Miles, Royal, and Zhang 2023).

If such a decoupling between unemployment rates and wages has taken place, the causal factor could be a decline in worker power and, in turn, the declining labor share of income, rather than an inherent flaw in the relationship as it was traditionally conceived. Labor market policies since the 1980s have diminished workers' bargaining power and limited their ability to negotiate for better wages, even when the labor market is strong (Ratner and Sim 2022). In part, this diminished worker power is the direct result of diminished union power, which historically afforded their members strong negotiation positions and higher wages as a result. This so-called union wage premium is evident not only in point-in-time estimates (Kerrissey and Meyers 2022) but also in cumulative lifetime earnings (Parolin and VanHeuvelen 2023). Unions bolster the negotiating power afforded to workers by low unemployment rates, which is why union decline has weakened wage boosts for the lowest earners (Callaway and Collins 2017) and exacerbated racial wage inequality (Rosenfeld 2012).

- ⁴ Mishkin, Sufi, and Hooper, "The Phillips Curve: Dead or Alive."
- ⁵ Tom Petruno, "Consumer Spending and Jobless Data: A Peculiar Threshold," UCLA Anderson Review, May 13, 2020, https://anderson-review.ucla.edu/jobless-high-spending.
- ⁶ For a more expansive view of the recent history and current dynamics of poverty in the United States, see Acs, Elliott, and Kalish (2016).
- ⁷ As with the unemployment-wage inflation relationship, there is evidence that the unemployment-poverty connection might have weakened over time, starting in the 1980s. Before this decade, measures of aggregate economic activity, such as the unemployment rate (or GDP growth, for example), were much better predictors of the poverty rate (Hoynes, Page, and Stevens 2006). The decoupling that has occurred in successive decades is due jointly to plateauing real median incomes, rising inequality, and a shift from cash to in-kind transfers (Lang 2007). The aging population, which is both out of work and more likely to experience poverty as a result, may also account for this deviation (Card 1991).

However, as with the unemployment-inflation relationship, reports on the death of the unemployment-poverty relationship might be exaggerated. The 1980s brought variable economic growth throughout different parts of the country and, with it, variable poverty reduction and rising economic inequality. There is evidence that healthy macroeconomic conditions such as low unemployment have reduced the poverty rate locally over this period (Card 1991).

- ⁸ Carmen Sanchez Cummin, "Latino workers are often segregated into bad jobs, but a strong U.S. labor movement can boost job quality and U.S. economic growth," Center for Equitable Growth, October 13, 2022, https://equitablegrowth.org/latino-workers-are-often-segregated-into-badjobs-but-a-strong-u-s-labor-movement-can-boost-job-quality-and-u-s-economic-growth.
- ⁹ Kelly Glass, "Black Families Were Hit Hard by the Pandemic. The Effects on Children May Be Lasting." *New York Times*, June 29, 2020, https://www.nytimes.com/2020/06/29/parenting/coronavirus-black-children-inequality.html.
- ¹⁰ For a brief explainer on benefits cliffs and their negative impact on employment, see Anderson et al. (2022).
- ¹¹ "Investing in American Workers Act," S. 1422, 117th Congress (April 28, 2021), https://www.congress.gov/bill/117th-congress/senate-bill/1422/text?s=1&r=32.

References

- Acs, Gregory, Diana Elliott, and Emma Cancian Kalish. 2016. "What Would Substantially Increased Mobility from Poverty Look Like?" Washington, DC: Urban Institute.
- Acton, Riley K. 2020. Community College Program Choices in the Wake of Local Job Losses. Washington, DC: Brookings Institution.
- Anderson, Theresa, Amelia Coffey, Hannah Daly, Heather Hahn, Elaine Maag, and Kevin Werner. 2022. Balancing at the Edge of the Cliff: Experiences and Calculations of Benefits Cliffs, Plateaus, and Trade-Offs. Washington, DC: Urban Institute.
- Athar, Heba M., Man-Huei Chang, Robert A Hahn, Eric Walker, and Paula Yoon. 2013. "Unemployment United States, 2006 and 2010." Centers for Disease Control and Prevention MMWR Supplement 62 (3): 27– 32.
- Autor, David H., and Mark G. Duggan. 2003. "The Rise in the Disability Rolls and the Decline in Unemployment." *The Quarterly Journal of Economics* 118 (1): 157–206. https://doi.org/10.1162/00335530360535171.
- Ball, Laurence. 2015. *Monetary Policy for a High–Pressure Economy*. Washington, DC: Center on Budget and Policy Priorities.
- Ball, Laurence M., Daniel Leigh, and Prakash Loungani. 2013. "Okun's Law: Fit at Fifty?" Working Paper 18668. Cambridge, MA: National Bureau of Economic Research. https://doi.org/10.3386/w18668.
- Barr, Andrew, and Sarah E. Turner. 2013. "Expanding Enrollments and Contracting State Budgets: The Effect of the Great Recession on Higher Education." The ANNALS of the American Academy of Political and Social Science 650 (1): 168–93.
- Bartel, Ann P., Maya Rossin-Slater, Christopher J. Ruhm, Meredith Slopen, and Jane Waldfogel. 2021. "Support for Paid Family Leave among Small Employers Increases during the COVID-19 Pandemic." Working Paper 29486. Cambridge, MA: National Bureau of Economic Research. https://doi.org/10.1177/23780231211061959.
- Betts, Julian R., and McFarland, Laurel L. 1995. "Safe Port in a Storm: The Impact of Labor Market Conditions on Community College Enrollments." Journal of Human Resources 30 (4): 741–65.
- Bivens, Josh. 2014. Long-Term Unemployment Has Not Damaged the Productivity of Workers: A Review of Evidence on Long-Term Unemployment's Lasting Effects on Workers, Households, and the Economy. Washington, DC: Economic Policy Institute.
- Blanchard, Olivier J., and Lawrence F. Katz. 1992. "Regional Evolutions." Brookings Papers on Economic Activity 23 (1): 1–76.
- Blanchard, Olivier J. and Lawrence H. Summers. 1986 "Hysteresis and the European Unemployment Problem." NBER Macroeconomics Annual 1986 (1): 15–78. https://doi.org/10.3386/w1950.

Bloom, Nicholas. 2014. "Fluctuations in Uncertainty." The Journal of Economic Perspectives 28 (2): 153-75.

- Bräuninger, Michael, and Markus Pannenberg. 2000. "Unemployment and Productivity Growth: An Empirical Analysis within the Augmented Solow Model." IZA Discussion Paper Series 136. Economic Modelling 19 (1): 105–20.
- Broaddus, Matt. 2020. *Medicaid Enrolment Continues to Rise*. Washington, DC: Center on Budget and Policy Priorities.

- Callaway, Brantly, and William J. Collins. 2017. Unions, Workers, and Wages at the Peak of the American Labor Movement. Working Paper 23516. Cambridge, MA: National Bureau of Economic Research.
- Card, David. 1991. In David M. Cutler and Lawrence F. Katz. 1991. "Macroeconomic Performance and the Disadvantaged." Brookings Papers on Economic Activity 1992 (2): 1–72. https://doi.org/10.2307/2534589.
- Cantor, David, and Kenneth Land. 1985. "Unemployment and Crime Rates in the Post-World War II United States: A Theoretical and Empirical Analysis." *American Sociological Review* 50: 317–32. https://doi.org/10.2307/2095542.
- 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. https://doi.org/10.1073/pnas.1518393112.
- Cauthen, Nancy K. 2011. Scheduling Hourly Workers: How Last Minute, Just-In-Time Scheduling Practices Are Bad for Workers, Families and Business. New York: Dēmos.
- Cawley, John, Asako S. Moriya, and Kosali I. Simon. 2011. "The Impact of the Macroeconomy on Health Insurance Coverage: Evidence from the Great Recession." Working Paper 17600. Cambridge, MA: National Bureau of Economic Research.
- Chodorow-Reich, Gabriel, and John Coglianese. 2019. Unemployment Insurance and Macroeconomic Stabilization. Washington, DC: Brookings Institution.
- Claxton, Gary, Matthew Rae, Gregory Young, and Nisha Kurani. 2021. Employer Health Benefits 2021 Annual Survey. San Francisco: KFF.
- Commonwealth Corporation. 2016. "Effective Practices in Sectoral Employment Programs." Boston: Commonwealth Corporation.
- Congdon, William J., Archana Pyati, and Joe Peck. 2021a. Lessons from Unemployment Benefit Expansions during the COVID-19 and Great Recessions. Washington, DC: Urban Institute.
- Congdon, William J., Archana Pyati, and Joe Peck. 2021b. A Renewed Urgency to Strengthen Unemployment Insurance's Automatic Triggers. Washington, DC: Urban Institute.
- Creamer, John, Emily A. Shrider, Kalee Burns, and Frances Chen. 2022. *Poverty in the United States:* 2021. Suitland, MD: US Census Bureau.
- Daly, Mary C., John Fernald, Òscar Jordà, and Fernanda Nechio. 2014. *Interpreting Deviations from Okun's Law.* San Francisco, CA: Federal Reserve Bank of San Francisco.
- Davis, Steven J., and Till von Wachter. 2011. *Recessions and the Costs of Job Loss*. Washington, DC: Brookings Institution.
- Debroy, Papia, and Justin Heck. 2022. Rise with the STARs. Washington, DC: Urban Institute.
- Edmark, Karin. 2005. "Unemployment and Crime: Is There a Connection?" The Scandinavian Journal of Economics 107 (2): 353-73.
- Eubanks, James D., and David G. Wiczer. 2015. "Where's the Wage Pressure?" St. Louis, MO: Federal Reserve Bank of St. Louis.
- Eyster, Lauren, and Semhar Gebrekristos. 2018. "Fulfilling the Promise of Career Pathways: Strategies that Support Career Advancement." Washington, DC: Urban Institute.
- Farooq, Ammar, Adriana D. Kugler, and Umberto Muratori. 2022. "Do Unemployment Insurance Benefits Improve Match and Employer Quality? Evidence from Recent U.S. Recessions." Working Paper 27574. Cambridge, MA: National Bureau of Economic Research.

- Farrell, Jane, and Sarah J. Glynn. 2013. *The FAMILY Act: Facts and Frequently Asked Questions*. Washington, DC: Center for American Progress.
- Finnigan, Ryan. 2018. "Varying Weekly Work Hours and Earnings Instability in the Great Recession." Social Science Research 74: 96–107. https://doi.org/10.1016/j.ssresearch.2018.05.005.
- FitzGerald, Kathleen, Emily Holcombe, Molly Dahl, and Jonathan Schwabish. 2012. *The Supplemental Nutrition Assistance Program*. Washington, DC: Congressional Budget Office.
- Foote, Andrew, and Michel Grosz. 2020. "The Effect of Local Labor Market Downturns on Postsecondary Enrollment and Program Choice." *Education Finance and Policy* 15 (4): 593–622.
- Fougère, Denis, Julien Pouget, and Francis Kramarz. 2009. "Youth Unemployment and Crime in France." *Journal of the European Economic Association* 7 (5): 909–38.
- Frenier, Chris, Sayeh S. Nikpay, and Ezra Golberstein. 2020. "COVID-19 Has Increased Medicaid Enrollment, but Short-Term Enrollment Changes Are Unrelated to Job Losses." *Health Affairs* 39 (10): 1822–31. https://doi.org/10.1377/hlthaff.2020.00900.
- Hadley, Jack. 2003. "Economic Consequences of Being Uninsured: Uncompensated Care, Inefficient Medical Care Spending, and Foregone Earnings." Washington, DC: Senate Subcommittee on Labor and HHS Appropriations.
- Haskins, Ron, Vicky Albert, and Kimberly Howard. 2014. The Responsiveness of the Temporary Assistance for Needy Families Program During the Great Recession. Washington, DC: Brookings Institution.
- Havranek, Tomas, and Marek Rusnák. 2013. "Transmission Lags of Monetary Policy: A Meta-Analysis." International Journal of Central Banking 9 (4): 39–75.
- Hillman, Nicholas W., and Erica Lee Orians. 2013. "Community Colleges and Labor Market Conditions: How Does Enrollment Demand Change Relative to Local Unemployment Rates?" *Research in Higher Education* 54: 765–80.
- Hobijn, Bart, Russell Miles, James Royal, and Jing Zhang. 2023. "The Recent Steepening of Phillips Curves." *Chicago Fed Letter* 475. Chicago: Federal Reserve Bank of Chicago.
- Hollenbeck, Kevin M. 2008. "Is There a Role for Public Support of Incumbent Worker On-the-Job Training?" Upjohn Institute Working Paper No. 08–138. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research. https://doi.org/10.17848/wp08–138.
- Hoynes, Hilary, Marianne Page, and Ann Stevens. 2006. "Poverty in America: Trends and Explanations." The Journal of Economic Perspectives 20 (1): 47–68.
- Hoynes, Hilary W., and Ankur J. Patel. 2015. "Effective Policy for Reducing Inequality? The Earned Income Tax Credit and the Distribution of Income." Working Paper 21340. Cambridge, MA: National Bureau of Economic Research.
- Irving, Shelley K. 2011. Comparing Program Participation of TANF and Non–TANF Families Before and During a Time of Recession. Suitland, MD: US Census Bureau.
- Jacobs, Elisabeth S. 2018. *Paid Family and Medical Leave in the United States: A Research Agenda.* Washington, DC: Washington Center for Equitable Growth.
- Jacobson, Louis S., Robert J. LaLonde, and Daniel G. Sullivan. 2011. *Policies to Reduce High–Tenured Displaced Workers' Earnings Losses Through Retraining.* The Hamilton Project Discussion Paper 2011–11. Washington, DC: Brookings Institution.
- Jawadi, Fredj, Sushanta K. Mallick, Abdoulkarim Idi Cheffou, and Anish Augustine. 2021. "Does Higher Unemployment Lead to Greater Criminality? Revisiting the Debate over the Business Cycle." *Journal of Economic Behavior & Organization* 192: 448–71. https://doi.org/10.1016/j.jebo.2019.03.025.

- Kahn, Lisa B. 2010. "The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy." *Labour Economics.* 17 (2): 303–16.
- Keisler-Starkey, Katherine, and Lisa N. Bunch. 2022. *Health Insurance Coverage in the United States:* 2021. Suitland, MD: US Census Bureau.
- Kerrissey, Jasmine, and Nathan Meyers. 2022. "Public-Sector Unions as Equalizing Institutions: Race, Gender, and Earnings." ILR Review 75 (5): 1215–39. https://doi.org/10.1177/00197939211056914.
- Kozak, Lola Jean, Margaret J. Hall, and Maria F. Owings. 2001. "Trends in Avoidable Hospitalizations, 1980–1998." *Health Affairs* 20 (2): 225–32. https://dx.doi.org/10.1377/hlthaff.20.2.225.
- Kroft, Kory, and Matthew J. Notowidigdo. 2011. "Should Unemployment Insurance Vary with the Unemployment Rate? Theory and Evidence." *The Review of Economic Studies* 83 (3): 1092–124. https://doi.org/10.3386/w17173.
- Labonte, Marc. 2016. Unemployment and Inflation: Implications for Policymaking. Washington, DC: Congressional Research Service.
- Lang, Kevin. 2007. Poverty and Discrimination. Princeton, NJ: Princeton University Press. https://doi.org/10.2307/j.ctt1bd6jww.
- Lee, Kwan Ok, and Gary Painter. 2013. "What Happens to Household Formation in a Recession?" *Journal of Urban Economics* 76: 93–109. https://doi.org/10.1016/j.jue.2013.03.004.
- Lee, J. O., Arie Kapteyn, Adriane Clomax, and Haomiao Jin. 2021. "Estimating Influences of Unemployment and Underemployment on Mental Health During the COVID-19 Pandemic: Who Suffers the Most?" Public Health 201: 48–54. https://doi.org/10.1016/j.puhe.2021.09.038.
- Lerman, Robert, Pamela Loprest, and Daniel Kuehn. 2019. Training for Jobs of the Future: Improving Access, Certifying Skills, and Expanding Apprenticeship. Washington, DC: Urban Institute.
- Levine, Michael, and Melinda Buntin. 2013. Why Has Growth in Spending for Fee-for-Service Medicare Slowed? Congressional Budget Office Working Paper Series 2013-06. Washington, DC: Congressional Budget Office.
- Lindbeck, Assar, and Dennis J. Snower. 2001. "Insiders versus Outsiders." *The Journal of Economic Perspectives* 15 (1): 165–88. https://doi.org/10.1257/jep.15.1.165.
- Lindner, Stephan, and H. Elizabeth Peters. 2014. "How Does Unemployment Affect Family Arrangements for Children?" Washington, DC: Urban Institute.
- Lo, Celia C., and Tyrone C. Cheng. 2014. "Race, Unemployment Rate, and Chronic Mental Illness: A 15-Year Trend Analysis." *Social Psychiatry and Psychiatric Epidemiology* 49: 1119–28. https://doi.org/10.1007/s00127-014-0844-x.
- London, Rebecca A., and Robert W. Fairlie. 2005. "Economic Conditions and Children's Living Arrangements." Ann Arbor, MI: National Poverty Center.
- Loprest, Pamela and Demetra Smith Nightingale. 2018. *The Nature of Work and the Social Safety Net*. Washington, DC: Urban Institute.
- Ludwig, Jens, and Steven Raphael. 2010. *The Mobility Bank: Increasing Residential Mobility to Boost Economic Mobility*. Washington, DC: Brookings Institution.
- Lunsford, Kurt G. 2021. *Recessions and the Trend in the US Unemployment Rate*. Cleveland: Federal Reserve Bank of Cleveland. https://doi.org/10.26509/frbc-ec-202101xom.
- Malby, Steven, and Philip Davis. 2012. *Monitoring the Impact of Economic Crisis on Crime*. New York, NY: United Nations Office on Drugs and Crime.

- Maggio, Mardo Di, and Amir Kermani. 2016. "The Importance of Unemployment Insurance as an Automatic Stabilizer." Working Paper 22625. Cambridge, MA: National Bureau of Economic Research.
- McClelland, Alison. 2000. "Effects of Unemployment on the Family." *The Economic and Labour Relations Review* 11 (2): 198–212. https://doi.org/10.1177/103530460001100204.
- McGee, Robin E., and Nancy J. Thompson. 2015. "Unemployment and Depression among Emerging Adults in 12 States, Behavioral Risk Factor Surveillance System, 2010." *Preventing Chronic Disease* 12. http://dx.doi.org/10.5888/pcd12.140451.
- Mishkin, Frederic S. 2007. "Inflation Dynamics." Working Paper 13147. Cambridge, MA: National Bureau of Economic Research. https://doi.org/10.3386/w13147.
- Newman, Katherine S., and Elisabeth S. Jacobs. 2023. *Moving the Needle: What Tight Labor Markets Do for the Poor*. Berkeley, CA: University of California Press.
- Nichols, Austin, Josh Mitchell, and Stephan Lindner. 2013. Consequences of Long-Term Unemployment. Washington, DC: Urban Institute.
- Nichols, Austin, Lucie Schmidt, and Purvi Sevak. 2017. "Economic Conditions and Supplemental Security Income Application." *Social Security Bulletin* 77 (4). Washington, DC: Social Security Administration.
- Öster, Anna, and Jonas Agell. 2007. "Crime and Unemployment in Turbulent Times." Journal of the European Economic Association 5 (4): 752–75. https://doi.org/10.1162/JEEA.2007.5.4.752.
- Novo, Mehmed, Anne Hammarström, and Urban Janlert. 2001. "Do High Levels of Unemployment Influence the Health of Those Who Are Not Unemployed? A Gendered Comparison of Young Men and Women during Boom and Recession." *Social Science & Medicine* 53 (3): 293–303. https://doi.org/10.1016/S0277-9536(00)00340-3.
- Okun, Arthur Melvin. 1962. "Potential GNP: Its Measurement and Significance." Cowles Foundation Paper 190. 1962 Proceedings of the Business and Economics Statistics Section of the American Statistical Association: 98–104.
- Parolin, Zachary, and Tom VanHeuvelen. 2022. "The Cumulative Advantage of a Unionized Career for Lifetime Earnings." *ILR Review* 76 (2): 434–60. https://doi.org/10.1177/00197939221129261.
- Paul, Mark, William Darity Jr., and Darrick Hamilton. 2018. The Federal Job Guarantee A Policy to Achieve Permanent Full Employment. Washington, DC: Center for Budget and Policy Priorities.
- Pavetti, Ladonna. 2014. Recent Report on TANF's Responsiveness to the Recession Has Serious Flaws. Washington, DC: Center for Budget and Policy Priorities.
- Pavetti, Ladonna. 2016. Work Requirements Don't Cut Poverty, Evidence Shows. Washington, DC: Center on Budget and Policy Priorities.
- Pedulla, David S. 2015. *Race, Gender, and Unemployment Scarring*. Presented in Session 215: Race, Gender, and Nativity Inequalities in Economic Outcomes. San Diego: Population Association of America Annual Meeting.
- Phillips, Julie, and Kenneth C. Land. 2012. "The Link between Unemployment and Crime Rate Fluctuations: An Analysis at the County, State, and National Levels." *Social Science Research* 41 (3): 681–94. https://doi.org/10.1016/j.ssresearch.2012.01.001.
- Pratap, Preethi, Alison Dickson, Marsha Love, Joe Zanoni, Caitlin Donato, Michael A. Flynn, and Paul A. Schulte. 2021. "Public Health Impacts of Underemployment and Unemployment in the United States: Exploring Perceptions, Gaps and Opportunities." *International Journal of Environmental Research and Public Health* 18 (19). https://doi.org/10.3390%2Fijerph181910021.

- Powell, Jerome. 2018. "Monetary Policy and Risk Management at a Time of Low Inflation and Low Unemployment." Speech at the 60th Annual Meeting of the National Association for Business Economics. Boston, MA.
- Raphael, Steven, and Rudolf Winter–Ebmer. 2001. "Identifying the Effect of Unemployment on Crime." *The Journal of Law and Economics* 44 (1): 259–83. https://doi.org/10.1086/320275.
- Ratner, David, and Jae Sim. 2022. "Who Killed the Phillips Curve? A Murder Mystery." *Finance and Economics Discussion Series* 2022–028. Washington, DC: Board of Governors of the Federal Reserve System. https://doi.org/10.17016/FEDS.2022.028.
- Reed, Debbie, Albert Yung-Hsu Liu, Rebecca Kleinman, Annalisa Mastri, Davin Reed, Samina Sattar, and Jessica Zeigler. 2012. An Effectiveness Assessment and Cost-Benefit Analysis of Registered Apprenticeship in 10 States. Oakland, CA: Mathematica Policy Research.
- Rees, Denial I., and H. Naci Mocan. 1997. "Labor Market Conditions and the High School Dropout Rate: Evidence from New York State." *Economics of Education Review* 16 (2): 103–9. https://doi.org/10.1016/S0272-7757(96)00037-4.
- Rezai, Armon, and Willi Semmler. 2007. "Productivity and Unemployment in the Short and Long Run." New York: The New School Schwartz Center for Economic Policy Analysis.
- Rosenfeld, Jake, and Meredith Kleykamp. 2012. "Organized Labor and Racial Wage Inequality in the United States." *American Journal of Sociology* 117 (5): 1460–502. https://doi.org/10.1086%2F663673.
- Sandstrom, Heather, and Sandra Huerta. 2013. "The Negative Effects of Instability on Child Development: A Research Synthesis." Low-Income Working Families Discussion Paper 3. Washington, DC: Urban Institute.
- Schneider, Daniel, and Kristen Harknett. 2019. "It's About Time: How Work Schedule Instability Matters for Workers, Families, and Racial Inequality." Cambridge, MA: Harvard Shift Project.
- Shaw, Hannah, and Chad Stone. 2010. Zandi Analyses Show "Democratic" Measures in Tax Cut-UI Deal Boost Economy, "Republican" Measures Add to Deficit Risks. Washington, DC: Center on Budget and Policy Priorities.
- Simson, Kristine. 2015. "Explaining Upper Secondary School Dropout: New Evidence on the Role of Local Labor Markets." *Empirical Economics* 48 (4): 1419–44. https://10.1007/s00181-014-0829-3.
- Smythe, Andria. 2019. "Labor Market Conditions and Racial/Ethnic Differences in College Enrollment." Journal of Economics, Race, and Policy 2: 173–83. https://doi.org/10.1007/s41996-019-00030-4.
- Stone, Chad, Arloc Sherman, and Brynne Keith-Jennings. 2015. No Mystery Why SNAP Enrollment Remains High: It's Still the Economy. Washington, DC: Center on Budget and Policy Priorities.
- Taylor, Jamila. 2019. Racism, Inequality, and Health Care for African Americans. Washington, DC: The Century Foundation.
- Tieken, Mara Casey. 2016. "College Talk and the Rural Economy: Shaping the Educational Aspirations of Rural, First-Generation Students." *Peabody Journal of Education* 91 (2): 203–23. https://doi.org/10.1080/0161956X.2016.1151741.
- Tsolmon, Ulya, and Dan Ariely. 2022. "Health Insurance Benefits as a Labor Market Friction: Evidence from a Quasi-Experiment." *Strategic Management Journal* 43 (8): 1556–74. https://doi.org/10.1002/smj.3378.
- Wachter, Till von. 2020. "The Persistent Effects of Initial Labor Market Conditions for Young Adults and Their Sources." The Journal of Economic Perspectives 34 (4): 168–94.

- West, Rachel, Indivar Dutta-Gupta, Kali Grant, Melissa Boteach, Claire McKenna, and Judy Conti. 2016. Strengthening Unemployment Protections in America: Modernizing Unemployment Insurance and Establishing a Jobseeker's Allowance. Washington, DC: Center for American Progress.
- West, Stacia, Amy Castro Baker, Sukhi Samra, and Erin Coltrera. 2021. *Preliminary Analysis: SEED's First Year.* Stockton, CA: Stockton Economic Empowerment Demonstration.
- White, Lynn, and Stacy J. Rogers. 2004. "Economic Circumstances and Family Outcomes: A Review of the 1990s." Journal of Marriage and Family 62 (4): 1035–51. https://doi.org/10.1111/j.1741-3737.2000.01035.x.
- Wiemers, Emily E. 2014. "The Effect of Unemployment on Household Composition and Doubling Up." Demography 51 (6): 2155–78. https://doi.org/10.1007%2Fs13524-014-0347-0.
- Wrigley-Field, Elizabeth, and Nathan Seltzer. 2020. Unequally Insecure: Rising Black/White Disparities in Job Displacement, 1981–2017. Washington, DC: Washington Center for Equitable Growth.
- Yagan, Danny. 2017. "Employment Hysteresis from the Great Recession." *Journal of Political Economy* 127 (5): 2505–58. https://doi.org/10.3386/w23844.
- Ylikännö, Minna, and Olli Kangas. 2021. "Basic Income and Employment." In *Experimenting with Unconditional Basic Income: Lessons from the Finnish BI Experiment* 2017–2018, edited by Olli Kangas, Signe Jauhiainen, Miska Simanainen, and Minna Ylikanno, 55–70. Cheltenham, GBR: Edward Elgar Publishing.
- Yu, Wei-hsin, and Shengwei Sun. 2019. "Race-Ethnicity, Class, and Unemployment Dynamics: Do Macroeconomic Shifts Alter Existing Disadvantages?" *Research in Social Stratification and Mobility* 63: 100422. https://doi.org/10.1016%2Fj.rssm.2019.100422.
- Zundl, Elaine, Daniel Schneider, Kristen Harknett, and Evelyn Bellew. 2022. "Still Unstable: The Persistence of Scheduling Uncertainty during the Pandemic." Cambridge, MA: Harvard Shift Project.

About the Authors

Joe Peck is a research assistant in the Executive Office of Research at the Urban Institute. His research focuses on the intersection of work and economic mobility, with a particular interest in work-related tax credits, industrial policy, and patterns of wage growth across industries. Peck has previously aided research at the Federal Reserve Bank of Atlanta, the Yale Sociology Department, the Center for Economic and Policy Research, and the University of Massachusetts Amherst.

STATEMENT OF INDEPENDENCE

WorkRise is a research-to-action network on jobs, workers, and mobility hosted by the Urban Institute. The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.

