

Unemployment during the pandemic: How to avoid going for broke

By Mark Duggan, Audrey Guo, and Andrew C. Johnston

KEY TAKEAWAYS

- Without significant policy changes, employers will be hit with hefty tax increases to pay for mounting unemployment insurance (UI) claims.
- Thinning tax bases make financing UI more challenging.
- Having state UI trust funds in the red may make it much harder for job markets to recover.

Since the onset of the COVID-19 pandemic in late February, tens of millions of Americans have lost their jobs. Anxiety among many employers and consumers is still high — suggesting little hope of a rapid recovery.

This leaves state and local governments with gaping budget shortfalls amid falling income and sales tax revenues while demand for public services rises. A particularly fast-growing area of state expenditure is the payment of unemployment insurance (UI) benefits.

There has been extensive discussion among policymakers and the media regarding the trade-offs of more generous or longer-lasting UI benefits, such as the federal government's provision of an additional \$600 per week that expired July 31. But there has been very little talk about the tax hikes they will incur.

Many states have depleted their UI trust funds in the current crisis and have started to borrow from the federal government to pay their residents' UI benefits. In the absence of additional policy changes, employers will be hit with significant UI tax increases over the next few years. And that will likely prevent some of the jobs that were lost from coming back.

In this policy brief, we explain how state unemployment insurance programs are financed and the threats to their solvency. We also discuss two reforms: one to relieve employers faced with crippling payroll tax increases in the coming years, and another to ensure that state UI trusts have enough money for future payouts.

Understanding unemployment insurance

Unemployment insurance is one of the largest social insurance programs in the United States, with each state running its own UI program to pay benefits to people laid off from their jobs. In most states, UI replaces about half of a worker's earnings up to a weekly benefit maximum (\$443 in the median state) for a maximum of 26 weeks (6 months).

While providing a needed cushion to workers, UI leaves policymakers with a difficult balancing act. As benefits become more generous, many recipients reduce their efforts to find and maintain jobs, reducing total income and burdening other workers (Johnston and Mas 2018). But if benefits become stingier, the cushion provides less support leaving some unemployed vulnerable to fall behind on their bills or lose their housing (Ganong and Noel 2019).¹

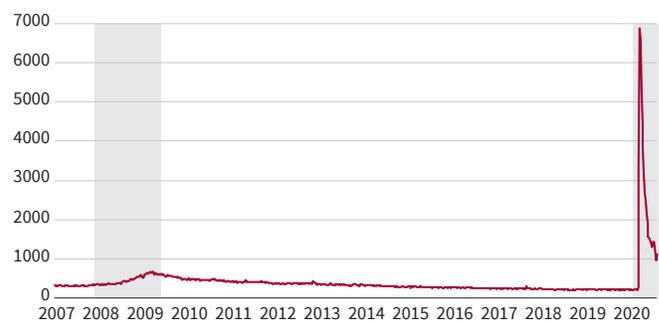
Benefits are generally paid to people with relatively low saving rates, so the money that is distributed is quickly spent, providing short-term stimulus for consumer goods. This leads economists to refer to UI as an “automatic stabilizer.” Without the need for additional legislation, states *automatically* spend more money on unemployment benefits when economic conditions deteriorate, and spending naturally retracts as the economy recovers.

During the strong labor market leading up to the pandemic, just 220,000 workers filed new UI claims in the typical week. In late February, the unemployment rate was at 3.5 percent — a 60-year low — and about 1.7 million Americans were receiving UI benefits.

But two months later, the pandemic's sudden and massive shock to the economy vaulted the U.S. unemployment rate to 14.7 percent — an 80-year-high. This April, rates varied substantially across states, from a high of 28.2 percent in Nevada to a low of 8.3 percent in Nebraska.

During the last week of March, 6.9 million Americans filed new claims for UI benefits. As demonstrated in Figure 1, this was *10 times higher* than the corresponding peak in new UI claims during the depths of the Great Recession more than a decade ago. By early May of this year, more than 25 million Americans were receiving UI payments and in every week since early March, new UI claims have exceeded the Great Recession peak of 660,000.

Figure 1. Weekly Initial Unemployment Insurance Claims (Thousands)



Source: U.S. Employment and Training Administration. Recessions indicated by shaded bars, data from NBER.

From March through the end of July, the federal CARES (Coronavirus Aid, Relief, and Economic Security) Act increased unemployment benefits for each recipient by \$600 per week. That meant the average UI recipient was paid one-third more in unemployment than she earned while working (Ganong et al. 2020).

This raised concerns that workers had little incentive to return to work or find a new job, a condition necessary for labor market restructuring and recovery.² This additional UI funding expired at the end of July after lawmakers were unable to agree on another round of federal spending. President Trump attempted to provide a \$300-dollar weekly “top-up” by executive order (with states given the option to provide an additional \$100). Whether and when that happens is unclear given that

¹ States differ in where they choose to fall on that trade-off. The maximum weekly benefit varies substantially across states, from a low of \$235 in Mississippi to a high of \$790 in Washington. Some states also have a maximum duration of less than 26 weeks.

² Recent research suggests that, at least in the short term, the disincentive effects of the increases in UI benefits (caused by the CARES Act) were minimal (Altonji et al. 2020).

states have to apply for the funding.³

UI benefits are financed by a payroll tax on employers. Unlike other taxes, UI tax rates are “experience-rated,” which means that an employer’s future tax rate rises if its employees claim UI benefits, and its tax rate falls when the firm avoids layoffs. This gives employers a strong incentive to balance the demand for layoffs with the cost that they impose on the UI system.

One consequence of experience-rating UI taxes is that tax rates increase as the economy begins to recover from recession. This significantly raises the cost of hiring new workers or retaining old ones, likely weighing down recovery of the labor market.

Figure 2. Average UI Tax Rate on Total Wages (1990-2018)



Source: Data for all employers obtained from the Department of Labor, and data for construction industry from the Quarterly Census of Employment and Wages.

As shown in Figure 2, the average UI tax rate increased by more than 50 percent from 2009 to 2012 as the recovery was haltingly underway. This increase was especially high in middle-class industries — like construction and manufacturing — that were hit hardest during the Great Recession. As this same figure shows, average tax rates

³ More than half of states had applied or signaled their intention to apply as of August 21. Only South Dakota announced that it would not be applying (Iacurci 2020). States that are approved are guaranteed just three weeks of federal funding for the enhanced UI benefits, though more federal funding may be available.

were more than 2.5 times as high among employers in construction as among all employers in the years following the three most recent recessions.

Surviving firms have to cover the UI costs generated by the employers that went out of business — causing them to be doubly burdened. Given the much larger increase in UI claims during the current recession relative to previous ones and the likely greater rate of firm exit, the increase in UI taxes could be substantially higher over the next few years than in the years following the Great Recession. This will encourage outsourcing and automation, induce some firms to shut down, and impede employment.

Softening the blow to businesses

Unless employment recovers with impressive speed, each claim will draw an average of \$7,000 in payments from state UI trust funds. Those payments will transform into an estimated \$270 billion dollars in payroll tax increases on firms over the next few years, reducing the ability of firms to resume normal hiring and employment and further stalling a labor market comeback.⁴

In March and April of this year, 20 states suspended experience rating to shield their employers from an avalanche of additional UI taxes in the upcoming years. These states span the political spectrum as well as geography, including Arizona, Georgia, Idaho, Maine, Maryland, Ohio, Texas, and Washington.⁵

⁴ For this calculation, we extrapolate weekly UI claims through the end of the year and assume that half of those claims become benefit spells. We use data on average weekly benefit amounts and average UI spell durations to calculate the typical cost of a UI benefit spell at a little over \$7,000. The product of these two values is an estimate of the UI benefit costs that will factor into UI taxes over the coming years. The actual average value could be substantially higher if the recovery is slow, as this would lead to longer and more costly average UI benefit periods.

⁵ These 20 states are Alabama, Arizona, Georgia, Idaho, Iowa, Louisiana, Maine, Maryland, Minnesota, Missouri, Montana, Nebraska, North Carolina, North Dakota, Ohio, Pennsylvania, South Carolina, Texas, Utah, Washington, and the District of Columbia.

While this policy change will — all else equal — hasten the labor market recovery in these states, it may also lead to a substantial increase in layoffs since it removes firms' financial incentives to retain workers. Consistent with this, a comparison of five states that suspended experience rating with five neighboring states that did not reveals that layoff rates (defined as new UI claims divided by the workforce) were 30 percent higher in the five that shut down experience rating.⁶

States are therefore in a bind. By maintaining experience rating, a wave of future tax increases may hamper the economic recovery and prolong unemployment. But suspending experience rating may induce additional layoffs today, when things are most dire.

To soften the blow over the next few years while maintaining the incentives for employers to retain their workforce, states could adjust each company's UI costs so that they are temporarily evaluated based on conditions in their industry — reducing the scope for tax increases that were out of the firm's control.

For the next few years, employers would essentially be graded on a curve, comparing their layoff history with industry peers rather than a non-existent perfect firm. For example, since restaurants have been hit especially hard during the pandemic while the average technology firm has thrived, a restaurant that laid off 10 percent of its workers would face a smaller tax increase than a computer software company that did the same. Employers would have essentially equal incentives to maintain their workforce, but would not face crushing tax increases if they happen to be in an industry that was differentially hit by the COVID pandemic and the resulting lockdowns.

The benefits of such a policy could be substantial. Research suggests that employment is highly sensitive to UI tax increases in part because they hit firms that are already on the proverbial ropes. Anderson and Meyer

(1997) find that a 1 percent increase in costs from UI taxes reduces employment by 2 percent. More recent research by Johnston (2020) finds even larger effects.

Shoring up the trust funds

The pandemic has shed light on the vulnerability of UI financing. Better maintenance of UI trust funds is vital to prepare states for the next economic downturn and improve prospects for future recoveries.

There is a large and growing gap in UI tax costs across jurisdictions. States like California and Florida have a low maximum tax rate and an annual tax base of around \$7,000 — the lowest allowed by federal law — resulting in maximum potential UI taxes of about \$400 per worker. In contrast, states like Washington and Oregon maintain large tax bases (\$52,700 and \$42,100, respectively) resulting in potential UI taxes of more than \$2,000 per worker.⁷

In good times, states store revenues from UI taxes in a trust fund and that fund is drawn down in the depth of recessions. In recent years, however, state trust funds have been low even in good times — a function of benefits that are more generous than their financing (von Wachter 2016). The Department of Labor's 2020 Solvency Report shows that despite a 10-year economic expansion, 21 state UI trust funds were below the minimum recommended reserve, just prior to the pandemic (U.S. Department of Labor 2020).⁸ As of August 2020, 11 states have already depleted their UI trust funds and have started to receive loans from the federal government to pay UI benefits.⁹

6 The matched pairs are — with the states that suspended experience rating listed first — Alabama and Mississippi, Ohio and Indiana, North Dakota and South Dakota, Arizona and New Mexico, and Idaho and Oregon.

7 Appendix Table 1 lists the UI tax base in each state in 2020 along with each state's maximum per-worker tax and maximum weekly UI benefit.

8 The Department of Labor recommends that states have reserves in their trust funds that are at least as large as the highest recent years of UI benefit payout.

9 As of August 25, 2020, 11 states have borrowed \$24.4 billion from the federal unemployment account. California, New York, and Texas account for 82% of that borrowing. See data at <https://oui.doleta.gov/unemploy/budget.asp>.

These deficits may contribute to lethargic recoveries. When trust funds are low, states must steeply raise rates to recover their costs and pay benefits. The timing of these increases could not be worse. Weak trust funds also undermine experience rating. When a state trust fund is in debt to the federal government, federal UI taxes rise on *all* firms in that state until the federal loan is repaid, regardless of the firm's layoffs.

In California, for instance, the large loan balance accrued during the 2008 recession was not repaid in full until 2018, hiking payroll taxes for employers across the board. This weakens the intended incentives of experience rating to encourage employment stability and curb abuse of the UI system. According to the same Labor Department Solvency Report cited above, California's UI trust fund was in the worst position of all 50 states just prior to the pandemic (Appendix Figure 1).¹⁰

The thinning tax base is a leading cause of low UI reserves. States choose how much of a worker's earnings are exposed to UI taxation, but the federal government can "update" the minimum requirement to keep pace with inflation and the rise in average earnings. The current federal requirement of \$7,000 has — remarkably — not been updated since 1982, eroding the tax base unless states have legislated increases or proactively linked their taxable UI earnings base to inflation or wage growth.

Another important consequence of a small tax base is that UI taxes become much more regressive. This can reduce the employment opportunities for part-time workers or those with low earnings since firms essentially pay an equal tax for each worker (Guo and Johnston 2020). In a state like California, an employer would pay the same UI tax for a worker who earned \$8,000 annually as for one who earned \$40,000.

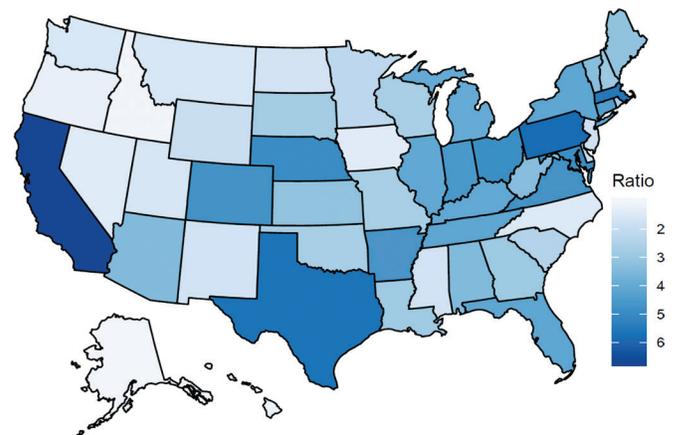
But the latter worker is eligible for a weekly UI benefit that is five times larger (\$400 per week versus just \$80

per week for the lower-paid worker). Expanding the UI program's taxable wage base in states like California would reduce the implicit penalty on hiring low-wage earners (principally seasonal and part-time workers as well as students).

To restore the health of UI trust funds, governments should expand their tax bases to be proportional to the level of benefits in their state. A basic reform to shore up trust funds could be to require states to have taxable wage bases at least half as large as their annual insurable earnings.

Figure 3 plots the ratio of insured wages to taxable wages across the country, with larger values indicating greater insurance than funding.

Figure 3. Ratio of Annual Insured Wages to Taxable Wages (2019)



Source: US Dept of Labor *Significant Provisions of State Unemployment Insurance Laws 2019*

In California the UI-insurable income is \$47,000, more than six times greater than the tax base of only \$7,000. This reform would naturally link revenues to the generosity of the state's UI system, allow states to lower tax rates, and bring in sufficient revenues to cushion workers the next time there is an economic shock. Harmonizing tax bases across states would also reduce the incentive for multi-state firms to reallocate jobs and operations based on state UI tax differences (Guo 2020).

¹⁰ As shown in Appendix Figure 1, California's solvency ratio of 0.21 was lower than the other 49 states, the District of Columbia, and Puerto Rico.

Time for action

The COVID-19 crisis has put unemployment insurance at center stage of American politics and economic policy. It has provided a lifeline for tens of millions of workers who have lost their jobs since the pandemic's onset six months ago, while at the same time exposing the system's vulnerabilities. Given the complexity of UI financing and the scarcity of empirical evidence on which to rely, this is an important area for additional work and exploration.

Unless policymakers take steps to reform how the states' unemployment insurance trust funds are financed, tax hikes will hurt labor market recoveries across the country — and with them, the American worker.

Appendices

Appendix Table A

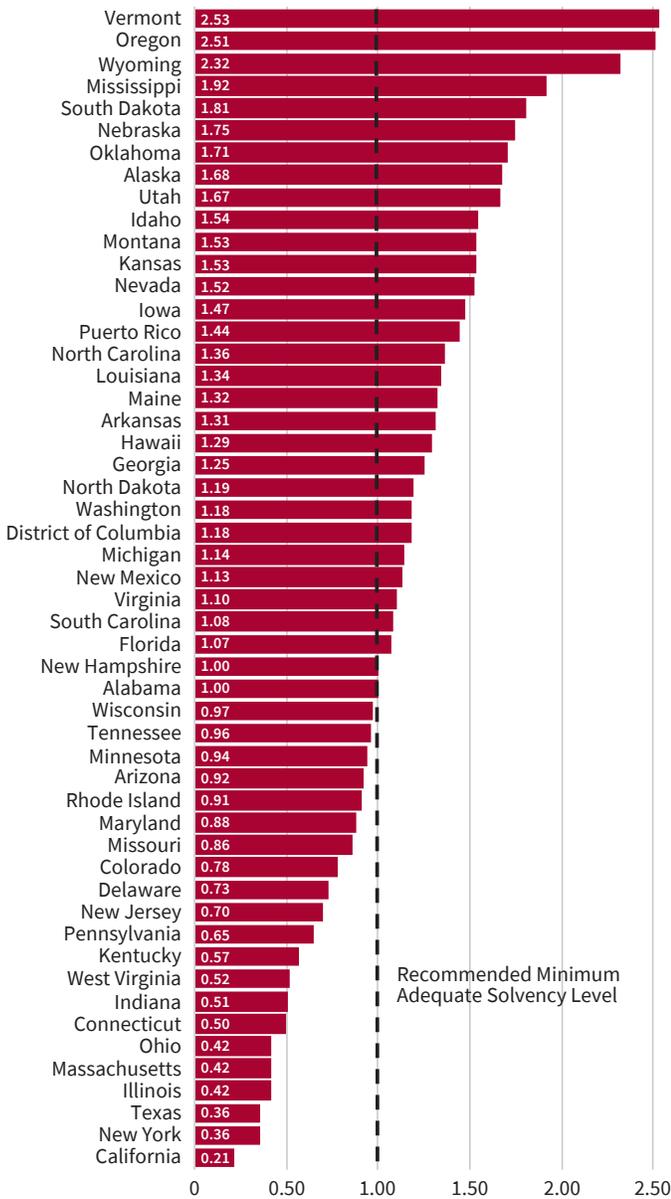
State	Max Weekly Benefit*	Taxable Wage Base	Max Per-Worker Tax
Alabama	265	8,000	544
Alaska	370	39,900	2,354
Arizona	240	7,000	826
Arkansas	451	10,000	600
California	450	7,000	434
Colorado	597	13,100	1,068
Connecticut	631	15,000	810
Delaware	330	16,500	1,320
District of Columbia	438	9,000	630
Florida	275	7,000	378
Georgia	330	9,500	770
Hawaii	630	46,800	2,621
Idaho	414	40,000	2,160
Illinois	471	12,960	892
Indiana	390	9,500	703
Iowa	467	30,600	2,295
Kansas	474	14,000	994
Kentucky	502	10,500	945

State	Max Weekly Benefit*	Taxable Wage Base	Max Per-Worker Tax
Louisiana	221	7,700	462
Maine	431	12,000	648
Maryland	430	8,500	638
Massachusetts	795	15,000	2,156
Michigan	362	9,000	567
Minnesota	717	34,000	3,060
Mississippi	235	14,000	756
Missouri	320	12,000	648
Montana	527	33,000	2,020
Nebraska	426	9,000	486
Nevada	450	31,200	1,685
New Hampshire	427	14,000	1,050
New Jersey	696	34,400	1,858
New Mexico	442	24,800	1,339
New York	450	11,400	832
North Carolina	350	24,300	1,400
North Dakota	595	36,400	3,549
Ohio	443	9,500	874
Oklahoma	520	18,100	996
Oregon	624	40,600	2,192
Pennsylvania	561	10,000	1,103
Rhode Island	566	23,600	2,289
South Carolina	326	14,000	756
South Dakota	402	15,000	1,403
Tennessee	275	7,000	700
Texas	507	9,000	540
Utah	560	35,300	2,471
Vermont	498	15,600	1,014
Virginia	378	8,000	480
Washington	749	49,800	2,689
West Virginia	424	12,000	900
Wisconsin	370	14,000	1,498
Wyoming	489	25,400	2,159

Source: US Dept of Labor Significant Provisions of State Unemployment Insurance Laws 2019 <https://oui.doleta.gov/unemploy/content/sigpros/2010-2019/July2019.pdf>

*For single workers. Some states offer additional dependent allowances

Appendix Figure 1 – State UI Trust Fund Solvency
(as of 1/1/2020)



Source: U.S. Department of Labor Trust Fund Solvency Report 2020
<https://oui.doleta.gov/unemploy/docs/trustFundSolvReport2020.pdf>

References

Altonji, Joseph, Zara Contractor, Lucas Finamor, Ryan Haygood, Ilse Lindenlaub, Costas Meghir, Cormac O’Dea, Dana Scott, Liana Wang, and Ebonya Washington. “Employment Effects of Unemployment Insurance Generosity during the Pandemic.” Working Paper (2020).

Anderson, Patricia M., and Bruce D. Meyer. “The effects of firm specific taxes and government mandates with an application to the U.S. unemployment insurance program.” *Journal of Public Economics* 65, no. 2 (1997): 119-145.

Ganong, Peter, and Pascal Noel. “Consumer spending during unemployment: Positive and normative implications.” *American Economic Review* 109, no. 7 (2019): 2383-2424.

Ganong, Peter, Pascal Noel, and Joseph S. Vavra. *U.S. Unemployment Insurance Replacement Rates During the Pandemic*, no. w27216. National Bureau of Economic Research (2020).

Guo, Audrey. “The effects of unemployment insurance taxation on multi-establishment firms.” Working Paper (2020).

Guo, Audrey, and Andrew C. Johnston. “The Finance of Unemployment Compensation and its Consequence for the Labor Market.” Working Paper (2020).

Iacurci, Greg. “This Map Shows Where States Stand on the Extra \$300 Weekly Unemployment Benefits.” CNBC, August 21, 2020. <https://www.cnbc.com/2020/08/21/that-extra-300-weekly-unemployment-benefits-where-states-stand.html>

Johnston, Andrew C. “Unemployment Insurance Taxes and Labor Demand: Quasi-experimental Evidence from Administrative Data.” Forthcoming at *American Economic Journal: Economic Policy* (2020).

Johnston, Andrew C., and Alexandre Mas. “Potential unemployment insurance duration and labor supply: The individual and market-level response to a benefit cut.” *Journal of Political Economy* 126, no. 6 (2018): 2480-2522.

U.S. Department of Labor. State Unemployment Insurance Trust Fund Solvency Report 2020. February 2020. <https://oui.doleta.gov/unemploy/docs/trustFundSolvReport2020.pdf>

Von Wachter, Till. “Unemployment Insurance Reform: A Primer.” Washington Center for Equitable Growth. October 2016. <https://equitablegrowth.org/unemployment-insurance-reform-primer/>



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