



EPI BRIEFING PAPER

ECONOMIC POLICY INSTITUTE • JULY 28, 2014 • BRIEFING PAPER #380

STATE CUTS TO JOBLESS BENEFITS DID NOT HELP WORKERS OR TAXPAYERS

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Executive Summary

In the United States, the federally supported but state-administered unemployment insurance (UI) system typically provides someone who has lost a job through no fault of his or her own with unemployment benefits for up to 26 weeks. In states that have experienced a sharp rise in unemployment rates, the extended benefit (EB) program kicks in, providing an additional 13 to 20 weeks of jobless benefits. And in times of severe economic distress, Congress routinely votes to provide extra weeks of aid beyond EB. The most recent Emergency Unemployment Compensation (EUC) program was authorized by Congress in June 2008 when the overall unemployment rate was 5.6 percent, the long-term unemployment rate (the share of the labor force that has been unemployed for 27 weeks or more) was 1.0 percent, and the average duration of unemployment was 17.1 weeks. It was allowed to lapse in December 2013, with the overall unemployment rate standing at 6.7 percent, long-term unemployment standing at 2.5 percent, and average duration standing at 37.1 weeks.

Even before the federal EUC program lapsed in December 2013, eight states reduced the number of weeks state-level unemployment benefits were available, claiming the cuts were needed to shore up insolvent state accounts in the federal Unemployment Trust Fund (UTF). (While federal payroll taxes fund certain administrative costs, state payroll taxes flow to state accounts in the UTF to fund regular benefit payments.) One of these states—North Carolina—also cut back the level of weekly benefit amounts, which triggered a cutoff of federal EUC benefits for that state in July 2013.

The first section of this brief provides an overview of the U.S. UI system, explaining the interaction between federal and state financing flows and detailing the workings of the federal Unemployment Trust Fund. The next section reviews the academic and research literature on the impact of UI benefits on the U.S. labor market. The last

section looks at those states that decided to shorten the duration of jobless benefits, reviewing possible reasons why state policymakers made this decision, and examining the (admittedly thin) data record of pre- and post-duration changes to see if the shortened durations had measurable impact on state labor markets. Following are key findings of the brief:

- Most state accounts in the federal Unemployment Trust Fund became insolvent in the wake of the Great Recession. The accounts of only 15 states (Alaska, Iowa, Louisiana, Maine, Mississippi, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Oregon, Utah, Washington, West Virginia, and Wyoming) plus Washington, D.C., and Puerto Rico, remained solvent.
- It was largely trust fund adequacy before the Great Recession—not significantly less-severe state-level recessions—that differentiated the states with solvent UTF accounts from other states: Fourteen of the 15 states that retained solvency in their UTF accounts ranked in the top half of states on a key measure of trust fund adequacy (a ratio of fund balance to future payouts) going into the Great Recession.
- The adequacy of state UTF accounts before the Great Recession was largely driven by whether the states collected enough revenue during the economic recovery and expansion between 2001 and 2007: State accounts that remained solvent following the Great Recession had not cut UI-dedicated state taxes (also known as State Unemployment Tax Acts or SUTA taxes) nearly as deeply as did other states during the 2001–2007 period.
- Failure to adequately fund state UTF accounts does not just lead to fiscal problems. It can weaken the function of UI as an automatic stabilizer and make the UI system as a whole less countercyclical than it should be by requiring tax hikes or benefit cuts during periods of depressed aggregate demand.

- Trust fund imbalances largely cannot explain why some states shortened UI durations while others did not. Only eight of the 35 states whose UTF accounts became insolvent following the Great Recession tried to address the situation by cutting the duration of their benefits. These states' UTF accounts as a whole were not appreciably worse off than those of states that chose to either increase revenues by raising the SUTA tax rate or enlarging the tax base, or to simply wait for labor market improvements to shrink their UTF accounts' debt burden naturally. What most of the eight states do share is a recent history of not supporting safety-net programs.
- Despite the widespread accounting distress in state UTF accounts following the Great Recession, the cuts that eight states made to the duration of unemployment benefits did very little to change their fiscal condition. Compared with a tax hike that would have achieved the same boost to the state UTF account's balance, the savings per covered worker in the six of these eight states for which data are available ranged from \$0.06 to \$0.69 per week. In short, unemployed workers lost an average \$252 per week of curtailed benefits just so states could save roughly 37 cents per covered worker per week in SUTA taxes, holding trust fund account balances equal.
- The effect of shortened unemployment benefits on state labor markets was very much in line with the existing empirical research on the effect of UI durations: There was no visible improvement in state labor market outcomes (specifically, the employment-to-population ratio of workers age 25 to 54) following cuts to UI durations.
- Even the North Carolina cuts to state UI, which were so extreme that they triggered a cutback of federal UI extended benefits to the state, provided no evidence of spurring employment growth in the state.
- Cuts to UI benefit duration in these eight states were disproportionately borne by African American work-

ers, who make up a larger share of the labor force in each of the eight states that cut the duration of jobless benefits than they do in the labor force of the other 42 states collectively. African Americans are also largely overrepresented among the long-term unemployed.

In short, most state unemployment insurance fund accounts became insolvent in the wake of the Great Recession because states did not adequately fund them in the early to mid-2000s recovery. States that responded to the insolvency by cutting the duration of unemployment benefits did not save significant amounts of money or boost employment. There are no clear differences between the financial positions or labor market outcomes of states whose UTF accounts became insolvent and cut the duration of benefits relative to states with insolvent accounts that did not cut benefits. But the benefit-cutting states did share some things in common: an overall lack of support for social programs that predates the Great Recession, and fiscal policies that feature low per capita state spending and tax collection. In short, states that decided to cut the available duration of jobless benefits appear to have made a political decision more than a fiscal one.

Some claim that extended unemployment benefits are to blame for extended high unemployment. But the effect of UI changes on the labor market is one of the most-studied topics in empirical economics, and the overall conclusion of the research literature reviewed in this report is that there is little evidence that extending unemployment aid provides a disincentive to work that is large enough to materially change the trajectory of key labor market aggregates. Rather, our review finds that the cause of the persistent problem of a depressed number of workforce participants relative to the overall population is that employers' demand for workers remains weak, not that workers have effectively chosen to stay unemployed to get benefits.

This finding has largely been reinforced by the examination of UI and labor market outcomes during and after the Great Recession, including at the state level. And yet several states chose to cut the duration of jobless benefits in recent years. We find that the track record of the UI system over the last decade strongly argues against such cuts, and for policy measures that could better ensure that the UI system serves its countercyclical role of boosting spending in times when demand drops. Such measures could be pursued by states doing a better job of prefunding UI trust fund accounts during economic expansions as well as by federal lawmakers substantially increasing the federal commitment to the UI system.

The report was updated July 29 to make corrections to Table 4 and related text regarding states' savings from limiting the duration of jobless benefits. The previous results undercounted these savings by calculating a fixed amount for each exhaustion, rather than allowing savings to grow with the difference between exhaustion incidence by duration.

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Section One: Background on the U.S. unemployment insurance system

The U. S. unemployment insurance (UI) system is designed to help those who have lost jobs through no fault of their own. (Note: Some organizations, including the Congressional Research Service, use the term unemployment compensation, or UC). Within broad guidelines established by the U.S. Department of Labor, states have a great deal of leeway in designing their UI systems while still receiving federal support: They determine who is eligible for benefits, and how much and for how long beneficiaries may be paid, as well as the base and rate that are taxed to fund the state portion of the UI system.¹ This federal/state interaction makes the overall system quite complex.

A Congressional Research Service report (Whittaker 2012) provides a useful background on the system. This EPI briefing paper draws many of the facts in this background section from the Whittaker report.

In brief, public unemployment benefits are administered through a joint federal-state program financed by payroll tax revenue collected under the Federal Unemployment Tax Act (FUTA) and by state payroll taxes imposed under the State Unemployment Tax Acts (SUTA). This system was originally constructed by the Social Security Act, signed into law by President Franklin D. Roosevelt in 1935. By funding unemployment insurance through employers' payrolls, lawmakers ensured that the unemployment insurance system is structurally countercyclical.

During times of low unemployment and rapid economic growth, revenues into the program increase while expenditures decrease. Conversely, during recessions, when unemployment rises and growth slows, expenditures increase while revenues decrease. In this manner, during economic downturns, the federal and state governments replace a portion of the economic activity that is lost through decreased wages by injecting money in the form of UI benefits into the economy. Moreover, during times of prosperity, states pay less in benefits than they receive in revenues, allowing them to build up account balances within the federal Unemployment Trust Fund (UTF), balances which tend to decline during downturns, when states must pay out more in benefits than they receive in taxes.

At the federal level, FUTA imposes a 6 percent tax on employers on each of their employee's first \$7,000 of wages annually. As long as an employer is located in a state with an unemployment insurance program approved by the federal government—and as long as that state has no delinquent federal loans to cover UI payments—the tax rate is reduced by 5.4 percentage points, thus making the effective FUTA tax only 0.6 percent. This means that in most states, employers pay a maximum FUTA tax of \$42 annually per employee. While regressive—\$42 is a lower percentage of a high earner's wages than a minimum wage worker's—the tax is very low because the \$7,000 taxable base has not changed since 1983.

The cost of regular UI benefits is borne by the states, paid for by SUTA taxes on employers' payrolls. Due to the different tax bases and wages in the states, SUTA taxes vary widely as a share of covered workers' total earnings, currently ranging from 0.4 percent in South Dakota to 2.2 percent in Hawaii. Nationwide, the average SUTA tax is equal to just under 0.9 percent of covered workers' total earnings, or about \$375 per worker who works for an employer that pays into the UI system (U.S. Department of Labor *Unemployment Insurance Data Summary*).

Federal role traditionally grows much larger during economic downturns

The FUTA tax funds state and federal administrative costs for the unemployment compensation system, as well as for state employment services, loans to states with insolvent unemployment insurance trust fund accounts, and the federal share of the "Extended Benefit," or EB, program. EB provides for additional weeks of unemployment benefits—usually 13 to 20 weeks beyond what the states normally offer, which is typically up to 26 weeks—in states that have experienced a sharp rise in unemployment rates. Usually, the federal and state government split the costs of EB evenly, though the federal government shouldered the entire burden during and after the Great Recession, due to a provision in the American Recovery and Reinvestment Act (Chen and Stone 2013). Currently, no state has an unemployment rate elevated enough relative to the recent past to qualify for EB.

During severe economic downturns, Congress typically provides additional weeks of unemployment benefits even beyond what the permanent EB program automatically adds to state UI systems based on the unemployment rate in a given state. Congress has acted on eight separate occasions—in 1958, 1961, 1971, 1974, 1982, 1991, 2002, and 2008—to temporarily lengthen the duration of UI benefits, ranging from an additional six weeks to an additional 63 weeks of benefits. All these extensions were designed to expire (Whittaker and Isaacs 2012).

The most recent federal program to extend unemployment benefits—Emergency Unemployment Compensation 2008, or EUC08—was implemented quicker and lasted longer than the two prior federal interventions, owing to a much deeper recession. EUC08 became active seven months into the recession and expired in December 2013, 60 months after the program took effect. In contrast, the Temporary Extended Unemployment Compensation (TEUC) program became active 12 months after the onset of the 2001 recession and ended 22

months later; 1991's EUC program took hold a full 16 months after the 1990–1991 recession began and ended after being in effect for 26 months.

At its most far-reaching, EUC08 added up to 63 weeks of benefits for recipients, bringing the maximum possible duration of unemployment benefits (including regular and EB benefits, and taking into account duration caps and other rules) to 99 weeks.² The comparable numbers for TEUC were 26 weeks for a maximum of 72 weeks, and for EUC91, 33 weeks for a maximum of 59 weeks.

However, when Congress allowed EUC08 to expire at the end of 2013, the labor market still had not recovered from the Great Recession. When EUC08 lapsed, the overall unemployment rate was more than 1 percentage point higher than it was when the program began and the percentage of the labor force unemployed for 27 weeks or more was twice as high as it was when the last three federal emergency UI programs expired. In short, there has never been a previous cutoff of EUC benefits in a labor market that remained so damaged. Even worse, 1.3 million workers were cut off from the program all at once—there was no phase-out of benefits.³

Because federal funding for UI benefits is important to states, the federal government uses the threat of financial penalties—including stopping the flow of EB and EUC funding—to ensure that states establish UI systems that comply with federal guidelines. For instance, though states are allowed to establish their own taxable bases and tax rates to fund their UTF accounts, the law requires employers in states that set their bases below the federal FUTA threshold of \$7,000 to pay much higher FUTA taxes. Therefore, no state has a taxable base under \$7,000. Similarly, while the EUC08 program was in effect, federal rules mandated cutting off all federal EUC funds to any state that cut the dollar amount of recipients' average weekly benefits, unless the state received a federal exemption. Without receiving an exemption, North Carolina cut its UI recipients' average weekly ben-

efits, effective July 1, 2013; the state was thereby cut off from the EUC program (Dalesio 2013).

Why most states' UI trust funds went insolvent following the recession—and the consequences of insolvency

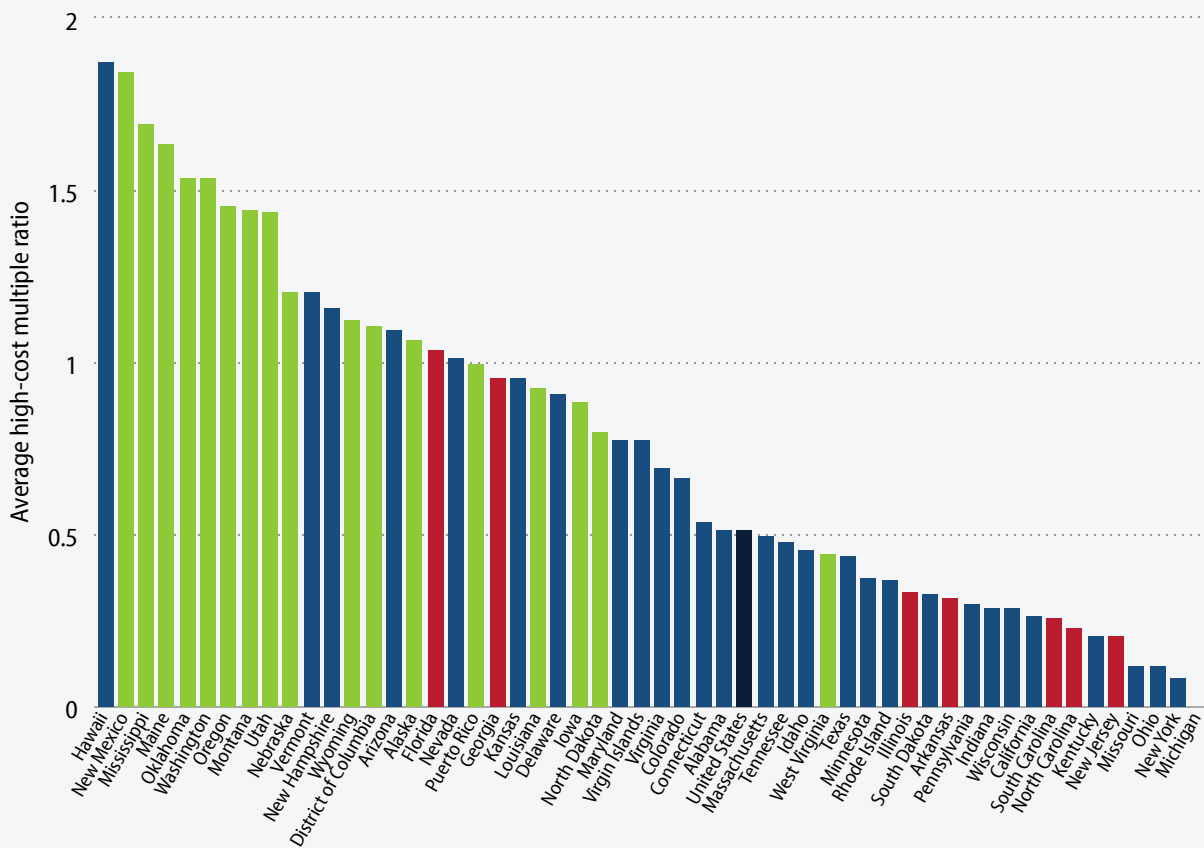
As mentioned earlier, the federal-state UI system is designed to enable states to increase the balances of their unemployment trust fund accounts during periods of economic prosperity and low unemployment so that the accounts maintain solvency during economic downturns, when the unemployment rate increases. However, inadequate trust fund account balances going into the Great Recession that began in late 2007, combined with the historic depth and length of the recession and slow recovery, led the majority of state UTF accounts to become insolvent at some point following the onset of the Great Recession. This inadequacy can be seen in a common measure of trust fund account health from the U.S. Department of Labor.

Among the department's guidelines for state UTF accounts is that they maintain a balance high enough to pay for the equivalent of an average of the three highest levels of benefit payments borne by that state over the past 20 years—a number that is called the “average high-cost multiple,” or AHCM. An AHCM ratio of at least 1.0 prior to a recession “indicates a state is minimally solvent. States below this level are vulnerable to exhausting their funds in a recession” (Whittaker 2012).

Figure A shows that as of the onset of the Great Recession in 2007, most states had not achieved this 1.0 threshold. In fact, in 2007—the prerecession high-water mark for trust fund balances—only 17 states (plus Washington, D.C. and Puerto Rico) met the 1.0 AHCM threshold. The main cause of inadequate UTF account balances was failure to collect enough revenue during the 2001–2007 economic recovery and expansion. As Chen and Stone (2013, note 31), referencing Wilus (2010) note:

FIGURE A [VIEW INTERACTIVE on epi.org](#)

Average high-cost multiple (AHCM) ratio, by state, 2007



Note: The average high-cost multiple (AHCM) ratio is a measure of state unemployment trust fund adequacy that divides the trust fund balance by the average cost rate of three high-cost years in the state's recent (typically 20-year) history. To be considered minimally solvent prior to a recession, a state trust fund must have an AHCM ratio of at least 1.0.

Green bars denote states whose trust fund accounts never went insolvent following the recession that began in December 2007. Red bars denote states that went insolvent and cut benefit duration. The black bar is the U.S. total.

Source: Authors' analysis of U.S. Department of Labor *Unemployment Insurance Data Summary*, 4th Quarter 2007

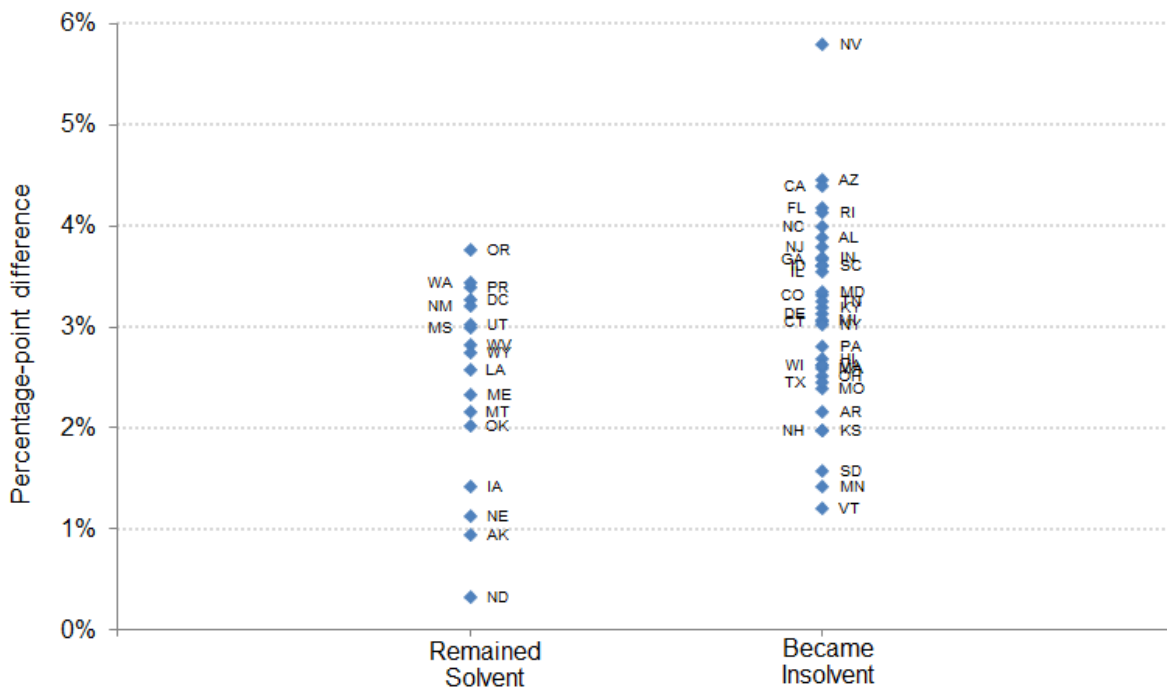
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Many states kept state UI taxes artificially low and by 2008 had actually reduced their UI tax rates to historically low levels. ... In inflation-adjusted dollars, average UI taxes were \$274 per employee in 2008, less than they had been in 1994 (\$350), and far less than they were in 1984 (\$515). The U.S. Department of Labor found that 28 states made significant legislative reductions of UI taxes between 1995 and 2001.

Another explanation for why some states saw their accounts within the UTF go insolvent following the Great Recession could simply be that they experienced significantly worse unemployment than other states. **Figure B** tests this proposition. For each state, it compares the average monthly unemployment rate between December 2007 and May 2014 with the unemployment rate that prevailed in December 2007 and plots the percentage-point difference on the graph. This difference

FIGURE B

Excess unemployment, by state, January 2008–May 2014



Note: States are grouped into two categories: those whose state unemployment trust funds remained solvent following the recession that began in December 2007 and those whose state UTF funds became insolvent. For each state, excess unemployment is calculated as the percentage-point difference between the average monthly unemployment rate from January 2008 to May 2014 and the unemployment rate in December 2007.

Source: Authors' analysis of Bureau of Labor Statistics Local Area Unemployment Statistics public data series

is a rough measure of how much excess unemployment each state faced due to the Great Recession. The figure breaks down this data by states whose UTF accounts became insolvent versus those whose accounts stayed solvent. While the latter group did indeed have slightly lower excess unemployment on average, there is very substantial overlap in the labor market distress experienced by these two groups of states. In short, several states that experienced extraordinary and lengthy increases in unemployment due to the Great Recession retained solvency in their UTF accounts, while some states that experienced only relatively mild excess unemployment saw their accounts become insolvent. This points again to states' failure to prepare UTF accounts in the run-up to the Great Recession as a prime cause of subsequent

insolvency. This failure, in turn, was largely led by intentional policy decisions to collect clearly insufficient revenue during this period.

This failure to collect enough revenue to restore the health of state UTF accounts during an economic expansion also undermined some of the macroeconomic benefits of the overall UI system. Optimally, the UI system is designed to be countercyclical. But when states *cut* taxes when unemployment is *low*, it not only prevents trust fund balances from increasing to sustainable levels, but also increases pressure to raise SUTA taxes during downturns, which imposes a fiscal drag and can harm economic recoveries. Claims that states' failure to collect revenue during good economic times could make the UI system less countercyclical are buttressed by the fact that

35 states raised UI taxes in 2010—the year with the highest unemployment rate since 1983 (Henchman 2011).

Along these lines, the U.S. Government Accountability Office has concluded that UTF account insolvency can be blamed on “long-standing UI tax policies and practices in many states over 3 decades” that “have eroded trust fund reserves, leaving states in a weak position prior to the recent recession” (U.S. GAO 2010). Indeed, though state UTF accounts were rebuilt quickly after the recession that began in 1981, they recovered much more slowly after both the 1990 and 2001 recessions, leaving the funds vulnerable leading into the Great Recession that began at the end of 2007.

States’ failure to respond to fiscal incentives

In spite of the fiscal consequences of trust fund insolvency, lower SUTA taxes became the norm prior to the Great Recession—and insolvent state UI trust fund accounts followed. When a state’s UTF account becomes insolvent, it remains legally required to continue paying benefits. In order to do so, a state is forced to borrow funds, typically from the Federal Unemployment Account (FUA) within the UTF.⁴

In order to help ensure repayment, if a state has outstanding FUA loans on January 1 of at least two consecutive years and has not repaid the loan in full by November 10 of the second year, the federal government will apply a “credit reduction” to that state’s FUTA taxes. This means that starting the second year for which a state has an outstanding loan, the federal government will not give a 5.4 percentage-point credit to the FUTA tax, but will instead reduce that credit by 0.3 percentage points to 5.1 percent, meaning the FUTA tax on employers will increase to 0.9 percent from 0.6 percent. Each additional year a state has an outstanding balance, its FUTA credit will be reduced by another 0.3 percentage points (with additional credit reductions applied in some circumstances). States may have these reductions lowered if they pay

back a certain portion of the outstanding loan in a given timeframe, or meet other criteria, though these situations rarely occur. The way states generally stop being hit with credit reductions is to pay their balance off in full.

States do not want to have their FUTA taxes raised, but that is just one consequence of insolvency. As the Congressional Research Service notes, states whose unemployment trust fund accounts become insolvent “will probably be forced to raise taxes on their employers or reduce UC benefit levels, actions that dampen economic growth, job creation, and consumer demand. In short, states have strong incentives to keep adequate funds in their trust fund accounts” (Whittaker 2012). And yet despite these strong fiscal incentives, the majority of states did not do what was necessary to avoid these outcomes.

Preventing insolvency and procyclicality in UI financing

The historic depth of the Great Recession and the very slow recovery that followed were always going to be hard on UTF accounts across the states. However, states owe as much of the fiscal troubles of their UTF accounts to inadequate preparation before the Great Recession as to the downturn itself. Fifteen states (Alaska, Iowa, Louisiana, Maine, Mississippi, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Oregon, Utah, Washington, West Virginia, and Wyoming, plus Washington, D.C., and Puerto Rico) had trust fund accounts that remained solvent after the Great Recession. These jurisdictions had, on average, much healthier trust fund accounts heading into the Great Recession than did other jurisdictions.

In fact, nine of the top 10 state trust fund accounts (ranked by AHCM ratios) in 2007 made it through the Great Recession without becoming insolvent. Fourteen of the 15 states whose UTF accounts did not go insolvent (plus Washington, D.C., and Puerto Rico) ranked in the top 25 of AHCM ratios in 2007. Eleven of the 19 juris-

dictions (17 states plus Washington, D.C., and Puerto Rico) with AHCMs of 1.0 or greater in 2007 made it through the recession without having to borrow to make up a hole in their unemployment trust fund accounts (U.S. Department of Labor, *Unemployment Insurance Data Summary*). In contrast, of the 15 states with the lowest AHCMs in 2007, six ended up cutting the duration of unemployment benefits.

Some states—Arizona, Florida, Hawaii, and Nevada, for instance—had healthy trust fund accounts heading into the Great Recession, but had housing bubbles so large that their deflation caused enough macroeconomic damage to overwhelm even healthy UTF accounts. Yet, the general rule is that the better-prepared states were, the more likely they were to make it through the effects of the Great Recession without encountering UTF account insolvency.⁵

As such, it is useful to examine the funding mechanisms in place in those states whose UTF accounts were healthy to see if they differed from states whose trust fund accounts became insolvent. **Figure C** provides evidence that one clear way in which states diverged was the rate at which they decreased their SUTA taxes in the boom years of the mid- to late-1990s. In 1995, states whose UTF accounts went insolvent after the Great Recession levied similar SUTA taxes (as a percentage of covered employees' wages) as states whose accounts remained solvent. However, even as most states decreased their taxes over the remainder of the 1990s, those that remained solvent in the wake of the Great Recession decreased these taxes *at a much slower rate*.⁷

States that had UTF accounts that became insolvent following the recession were clearly less diligent in collecting enough dedicated revenue to maintain a healthy trust fund balance. For example, during the 1990s the North Carolina General Assembly voted to cut SUTA taxes five different times and it authorized a one-year tax holiday. Half of the states that received federal transfers under the 2002 Reed Act—a law that allows Congress to

transfer money from the federal UTF to individual state accounts—used the funds to finance cuts in UI taxes on employers. (O'Leary and Van Erden 2012)

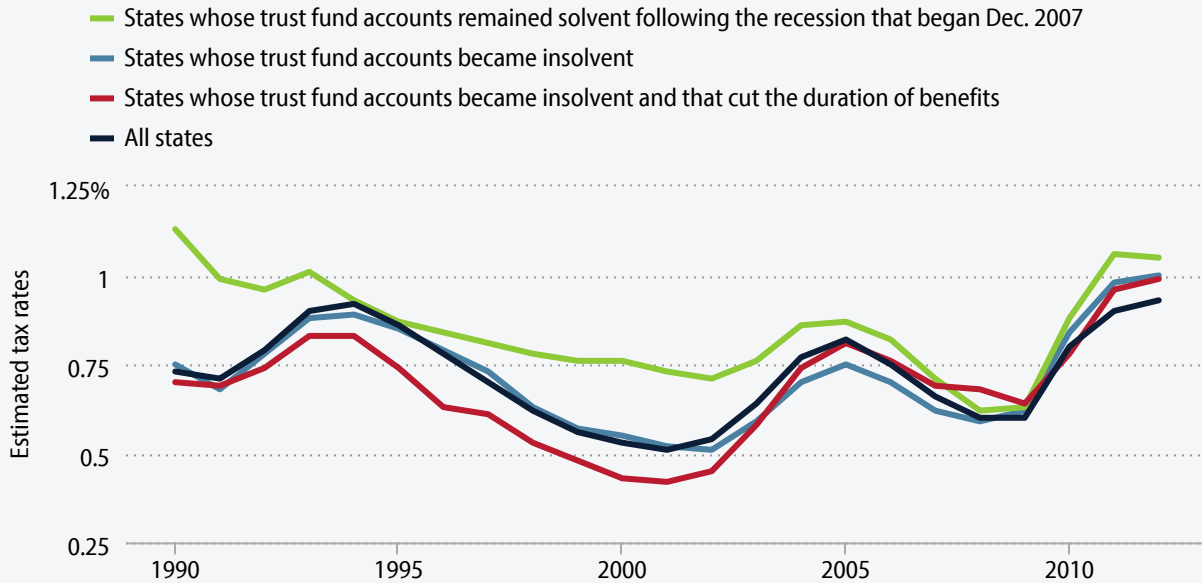
Because tax rates in many states rise if UTF account balances fall too low, proper macroeconomic management argues that UI trust fund accounts should be built up during good times and start emptying out during recessions (i.e., be countercyclical). But failure to collect adequate revenue during times of low unemployment and decent economic growth leads the taxes that finance UI benefits to become procyclical—at the state level, many states automatically raise rates when trust fund balances are low, and cut them, based on an automatic formula, when UTF accounts are adequately funded.⁸ And at the federal level, FUTA taxes increase when states have outstanding loans. So, state policymakers' failure to heed the principles of sound macroeconomic management even when given fiscal incentives to do so leads not just to accounting problems for state UTF accounts, but also to blunting some of the macroeconomic benefits of the UI system as a whole.

Figure D indicates that the introduction of procyclicality into some aspects of the federal-state UI system is a recent phenomenon. Until the 1990s, it was largely the case that contributions collected far exceeded the benefits paid for a number of years following periods with high UI benefit payouts. This link was broken in the mid-1990s boom; as benefits paid decreased dramatically, UTF account funding fell at a similar rate. This occurred again, though to a smaller extent, while the economy was growing in the first decade of the 21st century. This broken link facilitated the UTF account insolvency that occurred following the Great Recession.

Section Two: Empirical evidence on the impact of extended UI benefits

While the previous section examined the institutional makeup and fiscal accounting of the U.S. UI system, this

Average UI-dedicated state tax rates on total wages, by condition of state unemployment trust fund accounts, 1990–2012



Note: This chart displays, by state category, estimated average State Unemployment Tax Acts (SUTA) rates as reported by state agencies. The rates displayed are UI tax collections as a percent of total wages in taxable employment.

Source: Authors' analysis of U.S. Department of Labor *Unemployment Insurance Chartbook*, Table B7

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section examines the evidence regarding a perennial question asked by labor economists: Do UI benefits increase unemployment, and do extensions to eligibility for UI benefits also increase unemployment?

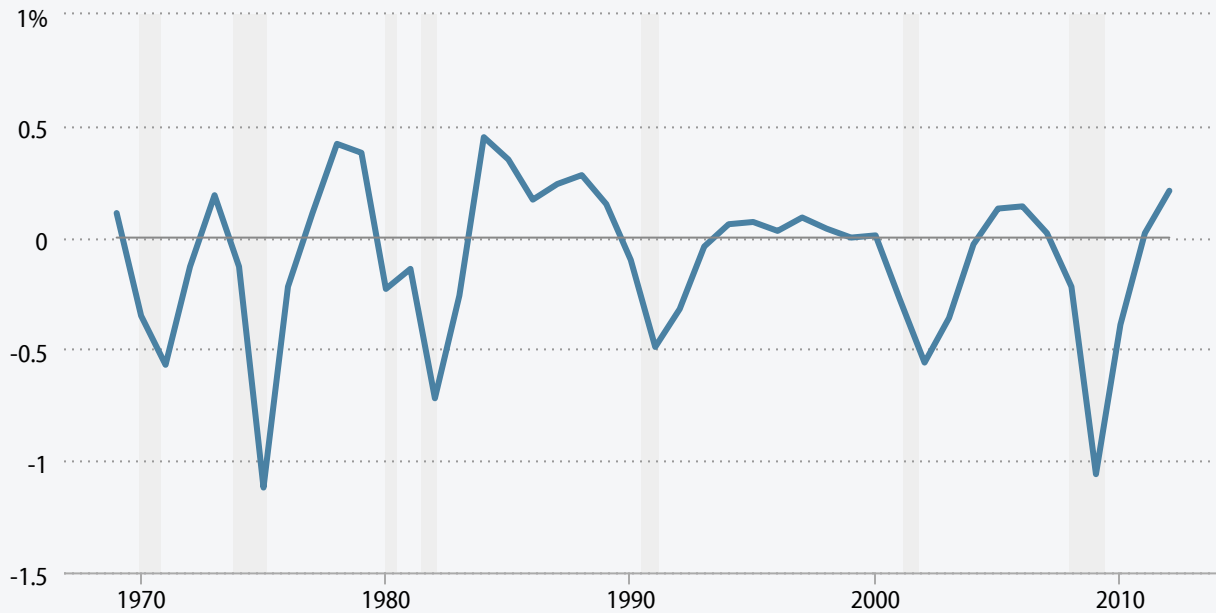
The EUC extensions passed in 2008 have spurred new empirical studies on this question, at least in part because these extensions were economically very significant, increasing duration by sometimes nearly four times longer than standard UI benefits. By and large, the studies examine three prongs of UI's impact on unemployment: microeconomic impacts, specifically the impact of UI benefit extensions on workers' decisions; macroeconomic impacts of UI benefit extensions on employers' demand for labor; and macroeconomic impacts of UI benefit extensions on economy-wide demand for labor.

Microeconomics of labor supply

Valletta and Kuang (2010) provided the first rigorous evaluation of the effect of the UI benefit extensions that took effect following the onset of the Great Recession. They note two channels through which UI benefit extensions may raise measured unemployment, but for very different reasons. On the one hand, UI benefits may reduce job search efforts by reducing the cost of joblessness, and hence reduce the probability that unemployed workers find work. On the other hand, because receipt of UI benefits is contingent upon active job-searching, benefits may keep workers actively searching for jobs. This active job-searching guarantees that workers will be classified as officially unemployed (instead of "out of the labor force") while jobless and will hence boost measured unemployment, but does not negatively

FIGURE D [VIEW INTERACTIVE on epi.org](#)

Unemployment Trust Fund contributions collected minus benefits paid, as a percent of total wages, 1969–2012



Note: Shaded areas denote recessions.

Source: Authors' analysis of U.S. Department of Labor *Unemployment Insurance Chartbook*, Table B11

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impact their probability of reemployment. The UI-based requirement for active job-search may in fact even *raise* this reemployment probability.

Further, they note that estimating the causal impact of UI extensions upon unemployment rates is extraordinarily difficult because UI extensions are endogenous by design: UI tends to be extended only when unemployment rates rise sharply. To make a credible inference on the causal impact of UI benefit extensions, Valletta and Kuang (2010) examine the increase in unemployment duration for two different groups of unemployed workers: those eligible for UI benefits and those not eligible for UI benefits.

Unemployment insurance benefits are generally restricted to those who become unemployed through “no fault of their own.” Workers fired for cause or who vol-

untarily leave a job are not eligible for UI. Further, UI receipt requires a recent work history, so those entering the labor force for the first time (high-school or college graduates, say) or those reentering after a relatively extended spell out of the labor force are also ineligible. During normal economic times, fewer than half of all unemployed workers are eligible for UI benefits. With the passage of EUC and with the very large number of workers losing jobs due to mass layoffs during the Great Recession, the share of UI-eligible workers rose dramatically during and right after the Great Recession, peaking at 65 percent in 2010 (National Employment Law Project 2013).

Even at this peak, however, there were a significant number of unemployed workers who were not eligible for UI benefits, and Valletta and Kuang (2010) use this group

as a “control” to contrast with unemployed workers that were “treated” with UI benefits receipt. They examine these groups for evidence that those workers receiving UI benefits had longer durations of unemployment or were less likely to become reemployed.

They summarize their key finding thus: “Notably, the increase in expected [unemployment] duration was similar for job-losers, the group that is eligible for UI benefits, and leavers and entrants, who are ineligible.” Specifically, they find that the slightly longer duration of unemployment experienced by the UI-eligible could explain just 0.4 percentage points of the 4.6 percentage-point increase in unemployment between 2007 and 2009. Further, they note that “given the experience with the elimination of extended UI benefits during previous U.S. economic recoveries, a permanent increase in the U.S. unemployment rate is unlikely.”

Rothstein (2011) undertakes a similar empirical exercise as Valletta and Kuang (2010) and supplements it with two other empirical tests of the effect of UI extensions on unemployment duration, both of which rely on exogenously differing UI durations across states. The first looks at the “gradual rollout and repeated expiration of EUC benefits through successive rounds of federal legislation” to compare different labor markets operating under different extended UI regimes but with plausibly similar labor market conditions. The second looks at the decision of individual states to either take up or decline optional extended-benefit (EB) provisions offered by federal legislation that could alter the availability of EB benefits.

Both EUC and EB types of extended UI benefits contain “triggers” that change the precise duration of UI benefits. These triggers are discontinuous—as soon as a state unemployment rate reaches a particular threshold, UI benefits increase in duration. So, for example, a state with a 7.5 percent unemployment rate could have longer UI durations available than one with 7.4 percent unemployment, even though the labor market conditions of these

states are essentially indistinguishable on this score. In his test of EUC rollout and expiration, Rothstein examines an individual’s “hazard rate” for exiting unemployment (essentially the probability of either returning to work or ending a job search and leaving the labor force in a given period) and examines the marginal effect of increased UI durations available to him or her according to state UI availability. He tries to absorb variation in labor market conditions by state through a range of measures.

Similarly, EB extensions also varied across even those states facing identical unemployment rates. This is because the American Recovery and Reinvestment Act (ARRA) provided for both full federal funding of normal EB extensions but also provided *optional*, more generous triggers for EB receipt. Rothstein (2011) augments his regression estimates of the hazard rate for exiting unemployment with controls for the availability of EB benefits under maximal and minimal state participation in EB, along with dummy variables indicating the status of each of the four EB triggers and EUC extensions available in these states. Given these controls, the only remaining variation in possible UI duration available to unemployed workers across states should be their states’ decisions regarding the take-up of the optional EB triggers in ARRA. This provides a test of how much a purely exogenous increase (i.e., driven by state governments’ political decisions) in UI durations can subsequently affect measured unemployment and reemployment probabilities.

Examining the sweep of this evidence, Rothstein concludes much as Valletta and Kuang (2010) do: The large increase in UI extensions had only small impacts on the duration of unemployment benefits (and hence overall unemployment rates) following the Great Recession:

Using a variety of comparisons that isolate different components of the variation in benefit availability, I find that extended benefits do reduce the rate at which unemployed workers re-enter employment. But the reductions are small, in most specifications smaller than effects of

extended benefits on labor force exit and always much smaller than what one would have expected based on older estimates in the literature. ... Combined [UI extensions] have raised the unemployment rate by only about 0.3 percentage points, implying that the vast majority of the increase in the unemployment rate was due to demand shocks rather than to UI-induced supply reductions.

Even more importantly, Rothstein (2011) estimates that most of the effect of UI extensions on unemployment stems not from any barrier to job-finding introduced by these extensions, but from the inducement to workers to remain in active job-search, which means that they will be classified as unemployed rather than out of the labor force. UI extensions that keep workers engaged in active job-search not only do not harm job-finding rates, they may actually increase them by boosting workers' job-search intensity.

Further, he notes that none of these estimates take into account what he calls "congestion" on the supply side of the labor market. This refers to the (quite strong) possibility that total employment levels in the economy are demand-constrained. Any impact of UI benefit extensions in raising unemployment hence does not change how many people are employed at any point in time, rather the extensions just change the distribution of who is able to secure these demand-constrained slots, with UI-ineligible workers more likely to fill them.

Farber and Valletta (2013) undertake a similar analysis as Rothstein (2011), but they include in their sample the recession and jobless recovery of 2002–2004, when Congress also authorized EUC benefits. Further, because their data run through the end of 2012, when some states had begun to see mild labor market recovery, they can look not only at UI benefit duration *extensions*, but also at the effect of UI benefit duration *rollbacks* as state unemployment rates fall and "turn off" some tiers of EUC benefits. Further, they rely on slightly different

identification conditions to assess the causal effect of UI extensions on both the probability of reemployment as well as the wider probability of unemployment exit.

Specifically, they examine the "time to exhaustion" for each individual in their data as an explanatory variable predicting exit from unemployment. This time to exhaustion is a function of total weeks of UI benefits available in a state and individuals' duration of unemployment. Like Rothstein (2011), they find a statistically significant but quantitatively small impact of increased UI durations pushing up unemployment durations and hence increasing the overall measured rate of unemployment. Farber and Valletta's preferred estimate of the effect of extensions on the overall unemployment rate mirrors the earlier Valletta and Kuang (2010) finding: UI extensions likely explain 0.4 percentage points of the 4 to 5 percentage-point increase in unemployment following the Great Recession.

Importantly, Farber and Valletta (2013) find an even stronger result than Rothstein (2011) regarding the channel through which impacts of extended benefits reduce measured unemployment: Any reduction in measured unemployment stemming from UI extensions is completely dominated by the incentive to keep workers engaged in active search and not by delaying reemployment. They write:

The results from the competing risk model are clear-cut. We do not find a substantial effect of extended benefits on time to exit to employment. This implies that there is not a significant reduction in search effort or increase in the reservation wage due to the availability of extended benefits. However, we do find a significant effect of extended benefits on time to exit to NILF [not in the labor force—jobless but not actively searching for work]. This implies that there may be individuals who remain attached to the labor force, perhaps searching at a low level, because extended benefits are available. In our view, this

latter effect of extended benefits does not have first-order efficiency consequences on the level of employment. It reflects mainly a redistribution to long-term job losers who, without extended benefits, would have left the labor force.

Finally, Chetty (2008) makes an important theoretical point about the effect of UI benefit extensions on unemployment duration: Even if these extensions do increase the time spent unemployed, this is not necessarily evidence that they have introduced economic inefficiency into decision-making. There are two reasons why UI may increase unemployment duration. First, it can lower the price of unemployment (or, lower the net benefit of working relative to not working), leading people with the choice of accepting work or choosing nonwork to choose the latter. Second, it can relieve severe liquidity constraints by providing people some measure of consumption possibilities during periods of nonwork, allowing them a wider variety of choices of activity rather than simply taking the first paid employment possibility offered to them, even if it is a bad employment match or inefficient. This second influence—relieving liquidity constraints—does not introduce economic inefficiency, even if it does lead to longer durations.

Chetty and coauthors (Card, Chetty, and Weber 2007) have looked at a natural experiment in Austria that provided large severance packages to some laid-off workers but not others to gauge the relative importance of these two channels (i.e., changed relative price of nonwork versus relieving liquidity constraints). They find that two-thirds of the effect of UI extensions run through the beneficial liquidity constraint effect. So, even the inefficiency implied by the small findings reported above (regarding increased unemployment duration stemming from labor supply decisions made after the passage of UI extensions during and after the Great Recession) should be heavily discounted when making judgments about the welfare consequences of UI extensions.

Macroeconomic effects of UI extensions I: Firm-level demand for labor

Traditionally, concern about introducing economic inefficiency through extended jobless benefits has centered on how benefits effect labor supply decisions. The peer-reviewed research surveyed above has shown these labor supply effects to be quite small. However, in recent debates over UI, some have invoked a not-yet published working paper to argue that the benefit extensions passed in the wake of the Great Recession have significantly reduced labor demand, and that these extensions actually explain a significant portion of the entire rise in unemployment since the Great Recession.

Hagedorn et al. (2013) argue that UI extensions significantly raise the reservation wages of potential workers—the minimum wage they need to be offered to accept a job offer—and that this increase in reservation wages chokes off labor demand. They set up an empirical test of the effect of UI extensions on unemployment by examining contiguous counties that straddle state borders. Two assumptions need to hold true for this to be a valid empirical test. One is that only differing UI durations distinguish labor markets of these contiguous counties; this assumption in effect argues that demand conditions should be identical because the counties border each other and demand shocks should flow smoothly across borders. Another assumption is for unemployment rates of border counties to be completely uncorrelated with unemployment rates in the other counties of the same state.

There are strong reasons to doubt both of these identifying assumptions. Regarding state-level demand shocks, it is easy to think of one such shock that would indeed stop at state borders: state spending. Shoag (2012) has shown that state spending shocks are indeed large and have economically significant effects.

Even more important, the data used by Hagedorn et al. (2013) do not support the second assumption: that the

unemployment rate of border counties be uncorrelated with the other counties within their states. The authors use the local area unemployment statistics (LAUS) from the Bureau of Labor Statistics (BLS) to undertake their empirical analysis. But the LAUS county-level unemployment rates are not independently estimated. Rather, they are partially model-based, and one input into the model prediction is precisely the unemployment rate in the rest of the state. Thus, even if actual unemployment rates did indeed vary continuously across borders, actually *measured* unemployment rates from the LAUS would indeed jump at state borders. Since UI extensions are correlated with higher unemployment rates (because they are “triggered” by high rates), this means that measured unemployment will “jump” at precisely those state lines that have longer UI durations, but the causation will run *from* the higher unemployment rates to extended UI, rather than the reverse.

Macroeconomic effects of UI II: Keynesian effects on aggregate demand

The more traditional macroeconomic case for how UI benefit extensions enacted during economic downturns impact overall unemployment concerns their importance as automatic stabilizers that keep household spending during recessions from falling as far as it would have in their absence. This Keynesian channel is very hard to estimate cleanly with econometrics because of the severe endogeneity problem already referenced: UI extensions only generally occur when unemployment is very high. Hence, a positive correlation between high unemployment and UI extensions will be persistent in the data, but driven by causality that runs from a spike in unemployment to extended UI.

However, evidence from large-scale macroeconomic models such as those used by the Federal Reserve Board, the Congressional Budget Office, and Economy.com consistently find that UI extensions are among the most effective forms of economic stimulus.

Vroman (2010) uses the Economy.com model and finds that pre–Great Recession estimates of the multiplier associated with UI benefit extensions (that is, the additional economic activity generated by each dollar of UI extensions that were deficit-financed) were too conservative, and that during and after the Great Recession, this multiplier may have exceeded two.

Card, Chetty, and Weber (2007) provide important *indirect* evidence of stabilizing effects, using the natural experiment with Austrian unemployed workers referenced earlier. The primary argument *against* the importance of UI benefit extensions (or any fiscal stimulus) as economic stabilizers is that households make consumption decisions by assessing *lifetime*, not *transitory* income. Since a spell of unemployment has a much smaller impact on lifetime income than it does on transitory income, the decline in consumption associated with it should make the current multiplier of UI benefits small. This reasoning, of course, assumes well-functioning capital markets that allow seamless consumption-smoothing following income shocks over a lifetime. However, Card, Chetty, and Weber (2007) show that most consumption decisions are made not in reference to lifetime incomes, but instead are heavily influenced by “cash on hand” and reflect the inability (or at least unwillingness) to use borrowing to smooth consumption over income shocks.

Section Three: Examining states that reduced UI durations

Despite the rich empirical evidence that unemployment benefit extensions passed during periods of labor market slack largely boost economic activity without significantly discouraging job-search efforts, many states began cutting back UI benefit durations in recent years, and the federal government failed to extend the EUC program at the end of 2013. This section will take a closer look at the states that cut back on UI benefit durations. Specifically, we will examine the effectiveness of duration cutbacks on both fiscal measures as well as labor market outcomes.

TABLE 1

Maximum weeks of unemployment insurance benefits, by states that cut benefits duration in the aftermath of the Great Recession

State	Current maximum duration (compared with prior maximum of 26 weeks)	Effective date of cut
Arkansas	25	March 30, 2011
Florida	Sliding scale, 12 to 23	January 1, 2012
Georgia	Sliding scale, 14 to 20	July 1, 2012
Illinois	Sliding scale, 25 to 26	January 1, 2012
Michigan	20	January 1, 2012
Missouri	20	April 13, 2011
North Carolina	Sliding scale, 12 to 20	July 1, 2013
South Carolina	20	June 14, 2011

Note: The number of weeks of benefits available to recipients in states with sliding scales is “determined by the state’s unemployment rate.” In Illinois, the criteria for the duration cut were met in 2012 but not 2013 (meaning 26 weeks were available in 2013). In North Carolina, labor market conditions at the time of implementation were such that the maximum fell to 19 weeks.

Source: Evangelist (2013)

Prior to the Great Recession, most states offered up to 26 weeks of benefits—the exceptions were Montana (28) and Massachusetts (30, when federal emergency benefits are not in effect). No state had a maximum benefit of fewer than 26 weeks at any point between 2000 and 2011 (O’Leary and Van Erden 2012).⁹ In the aftermath of the recession, however, eight states reduced the maximum number of weeks of unemployment insurance benefits available—these states, the current duration after cuts, and the dates on which durations were reduced are shown in **Table 1**.

Was the insolvency in these eight states so dire it merited benefit cuts?

While a significant majority of state UTF accounts became insolvent in the wake of the Great Recession, only eight of these states decided to address the situation by cutting the duration of their benefits—effectively the only way to cut UI costs without losing out on federal

EB and EUC benefits. (As noted earlier, reducing average weekly benefits, i.e., cutting the dollar amount beneficiaries receive, would get states kicked out of the EB and EUC systems.) An obvious question arises: Relative to the other states whose UTF accounts became insolvent, were these eight in more dire shape and thus in need of deeper cuts?

At a basic level, when each of the eight states cut the number of weeks of benefits available, it had outstanding loans to the federal Unemployment Trust Fund. But, alone, having an insolvent UTF account and outstanding federal loans was hardly unique following the Great Recession. Indeed, the number of states with outstanding loans to the federal trust fund at any one time peaked in April 2010, when 34 states (plus the Virgin Islands) had loans outstanding to pay for UI benefits.

It is true that each of the eight states that cut UI benefit duration is on a somewhat smaller list of 24 states (plus

the Virgin Islands) whose FUTA taxes increased because they had loans outstanding long enough to trigger a FUTA “credit reduction.” And the credit reductions for the eight duration-reducing states were generally larger than in the other 16 states that saw credit reductions. So the states that reduced their maximum benefit duration were indeed among those whose UTF accounts were in the worst shape. However, the magnitude of their accounting problems was not that different from that of other state UTF accounts that became insolvent during the Great Recession.

Figure E provides one way to view their financial shape relative to other states. The figure uses data from the U.S. Department of Labor, which calculates how much a state would need to raise its UI-dedicated state tax (its SUTA tax) on each covered worker in order to boost its UTF account to a comfortable level of solvency.¹⁰ The figure focuses on the fourth quarter of 2011, because that is almost the midpoint of the eight states’ decisions to cut benefit duration (three made cuts earlier in 2011, four made cuts in 2012, and one made cuts in 2013). In 2011, each of the eight duration-cutting states would have had to raise their per-worker SUTA tax by at least \$57 per year. But in all there were 26 states (and also Puerto Rico, shown, and the Virgin Islands, not shown) that would have needed to raise their SUTA tax rates by at least this amount, including Mississippi, West Virginia, and Puerto Rico, whose UTF accounts never became insolvent. Moreover, while North Carolina, one of the eight states that cut benefit duration, would have needed to raise its rates by \$242 to achieve an “adequate financing rate,” six other states (as well as the Virgin Islands, not shown) would have needed to raise their rates even more, and yet none of them decided to cut UI benefit duration.

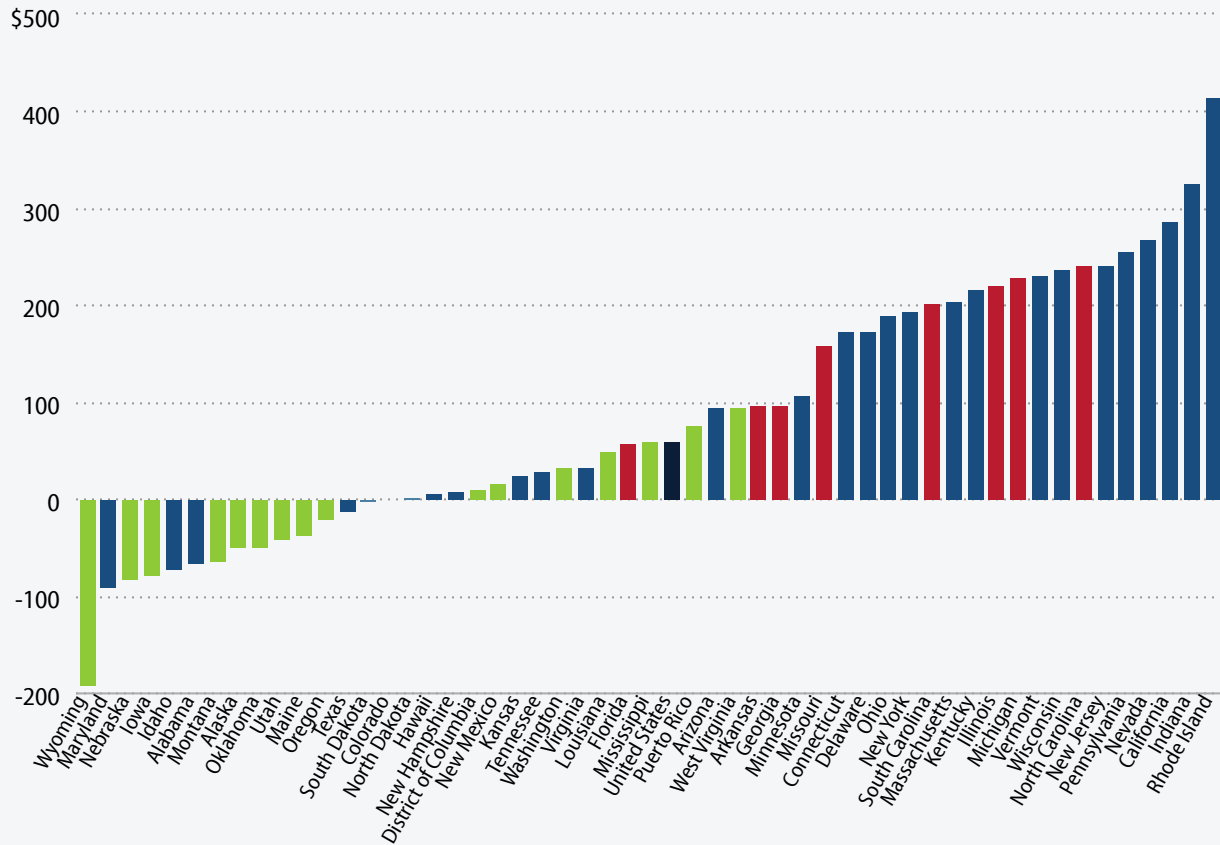
Similarly, the value of outstanding Federal Unemployment Account loans per covered worker do not differ significantly between states that did and did not cut maximum benefit duration (aside from Michigan, perhaps). This is evident in **Figure F**, which depicts the outstand-

ing loans in March 2011—when the dollar value of outstanding loans hit its apex at more than \$47 billion. Outstanding FUA loans totaled about \$22 billion as of March 2014 (U.S. Department of Labor *Unemployment Insurance Data Summary*).

Though the eight states that cut UI benefit duration don’t appear to have state UTF accounts in significantly worse financial shape than other states whose UTF accounts went insolvent following the Great Recession, they do share similarities, as shown in **Table 2**. For example, they are generally low-tax, low-spending states. They tend not to have a state-based Earned Income Tax Credit and tended to not offer Medicaid benefits to childless adults before the Affordable Care Act (ACA) took effect. For states claiming to be in desperate-enough fiscal straits to cut the duration of UI benefits despite a deeply damaged labor market, it is striking that four of the eight turned down the Medicaid expansion offered under the ACA. The composition (as opposed to overall collections) of their tax systems ran the gamut: Four of the eight (Arkansas, Florida, Georgia, and Illinois) were among the most regressive in the country while the other four ranged from moderate to relatively progressive.

FIGURE E [VIEW INTERACTIVE on epi.org](#)

Change in annual UI-dedicated state taxes per covered worker needed to achieve a comfortable level of solvency* for state UTF account, 4th quarter 2011

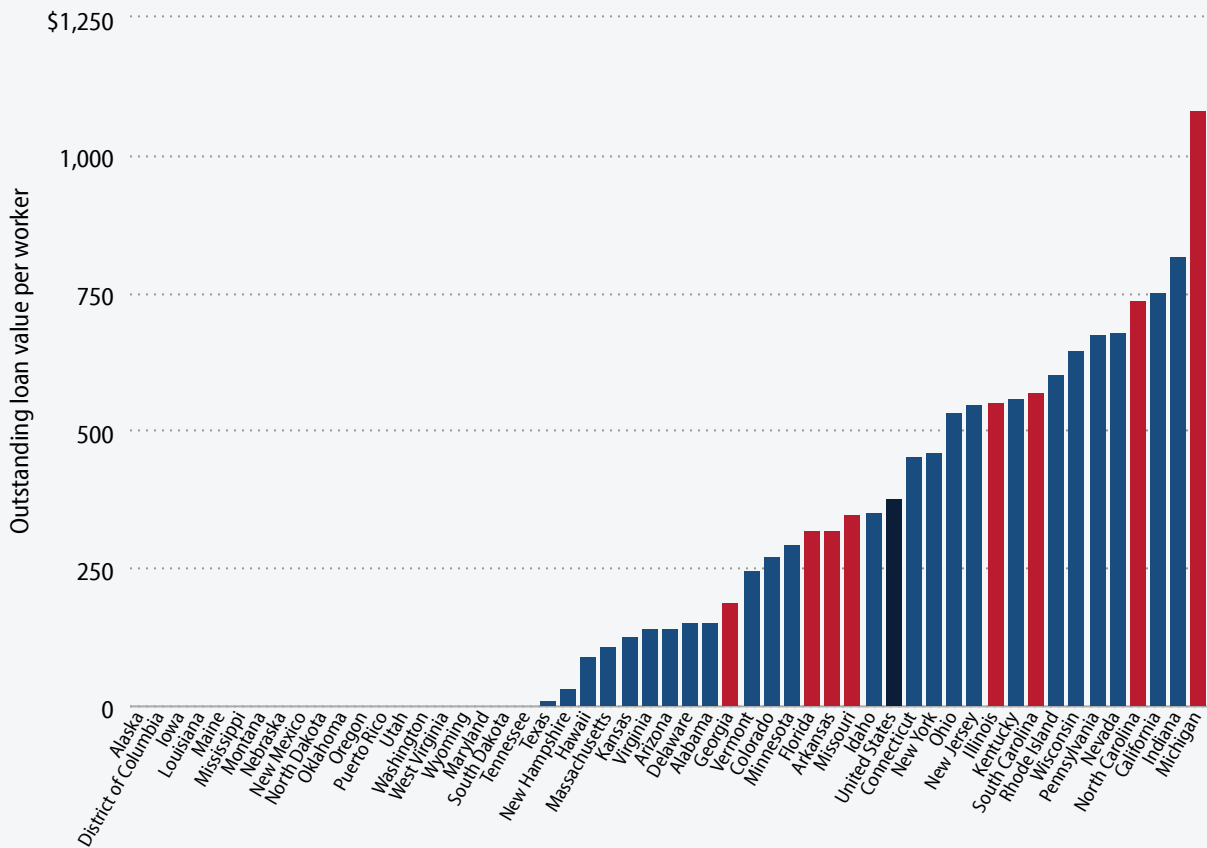


*The U.S. Department of Labor has a formula for determining what it calls an “adequate financing rate” for state UTF accounts. This figure shows how much a state would have to change its UI tax to achieve this rate.

Note: Green bars denote states whose trust fund accounts never went insolvent following the recession that began in December 2007. Red bars denote states whose trust funds went insolvent and that cut benefits duration. The black bar is the U.S. median. The figure excludes the Virgin Islands.

Source: Authors’ analysis of U.S. Department of Labor *Unemployment Insurance Data Summary*, 4th Quarter 2011 and 2nd Quarter 2012, and *Significant Measures of State Unemployment Insurance Tax Systems*, 2011

Outstanding Federal Unemployment Account loan value per covered worker, by state, March 2011



Note: Absence of bars denote states whose trust fund accounts never went insolvent following the recession that began in December 2007. Red bars denote states whose accounts went insolvent and that cut benefits duration. The black bar is all states' loans divided by all covered workers in the U.S.

Source: Authors' analysis of Department of Labor *Unemployment Insurance Data Summary*, 3rd quarter 2011 and data provided by Department of Labor staff

TABLE 2

Characteristics of states that cut UI benefit duration in the aftermath of the Great Recession

State	Medicaid expansion? ^{2.1}	Childless adults eligible for Medicaid pre-ACA? ^{2.2}	Party of governor ^{2.3}	Party in control of legislature ^{2.3}	State EITC? ^{2.4}	State and local tax revenue per capita, 2011 rank ^{2.5}	State and local expenditures per capita, 2011 rank	Rank of tax state system progressivity
<i>Arkansas</i>	Yes, with waiver	Yes	D	D	No	\$3,387 / 39	\$7,074 / 42	40
<i>Florida</i>	No	No	R	R	No	\$3,424 / 38	\$7,240 / 39	50
<i>Georgia</i>	No	No	R	R	No	\$3,172 / 35	\$6,524 / 51	39
<i>Illinois</i>	Yes	No	D	D	Yes	\$4,627 / 15	\$8,105 / 26	48
<i>Michigan</i>	Yes, with waiver	No	R	R	Yes	\$3,655 / 30	\$7,463 / 36	20
<i>Missouri</i>	Yes, with waiver	No	D	R	No	\$3,268 / 43	\$6,901 / 45	19
<i>North Carolina</i>	No	No	R	R	No	\$3,491 / 35	\$6,970 / 44	12
<i>South Carolina</i>	No	No	R	R	No	\$2,937 / 50	\$7,604 / 33	8

2.1. Medicaid benefits are listed as of July 2010. Some benefits were available in 18 states, plus Washington, D.C.

2.2. Arkansas' Medicaid eligibility for childless adults was limited: "Arkansas currently does not offer Medicaid coverage to childless adults. (Exception: The state has a federal waiver to cover childless adults through the ARHealthNetworks program. ARHealthNetworks is a limited health plan designed for small businesses. It is partially funded by Medicaid and SCHIP [ARKids] funds)" (National Conference of State Legislatures 2010)

2.3. Parties of governor and control of legislature are as of when UI duration was cut in each state.

2.4. Earned Income Tax Credit (EITC) benefits are listed as of January 2014. Some form of EITC was available in 25 states plus Washington, D.C.

2.5. All rankings include 50 states and Washington, D.C.

Source: Authors' analysis of Center on Budget and Policy Priorities (2014), Kliff (2014), National Conference of State Legislatures (n.d., 2010), Tax Policy Center (2013a, 2013b), and data provided by the Institute on Taxation and Economic Policy

In summary, while the eight states that decided to cut UI benefit duration all were indebted to the federal government, subjected to higher FUTA taxes, and would have needed to dramatically raise state UI taxes in order to achieve solvency, they were not necessarily worse off than several other states that chose different paths, either increasing revenues by raising the SUTA tax rate or enlarging the tax base, or simply allowing debt to increase and waiting for labor market improvements to shrink the UTF account debt burden naturally. What they do share in common is a general lack of support for safety-net programs. This—combined with our finding in the next section that duration cuts saved very little money—suggests the duration cuts were more likely a political decision than a fiscal decision.

Given that the cutbacks in duration seem driven as much by politics as by fiscal pressures, this suggests another examination of the characteristics of states that reduced duration. Gais, Dadayan, and Bae (2009) have identified a strong correlation between a state's spending on safety-net programs and the share of its population that is African American, even after controlling for a range of other influences (including state per capita income, the business cycle, age-structure of the population, and relevant political structures). This pattern of high African American population shares in states characterized by less support for safety-net spending can also be seen in the decision of states to accept the Medicaid expansion made available under the Affordable Care Act (ACA): While the share of the U.S. population that is African Americans is 12.6 percent, African Americans are 8.4 percent of the population in states that accepted the Medicaid expansion but 13.6 percent of the population in states that rejected the expansion.¹¹

As we document in **Table 3**, in states that reduced UI duration, African Americans are a higher share of the state labor force than of the labor force of all other states collectively and are overrepresented among the long-term unemployed. The table shows, for each state, the shares

of the labor force and long-term unemployed that are white, African American, and Latino, and the gap between these measures. This last measure (the gap between each racial/ethnic group's share of the labor force and their share in the long-term unemployed, shown in the last three columns) shows the degree to which long-term unemployment in a given state is disproportionately a nonmajority problem. In seven of the eight states (all except Missouri), long-term unemployment does indeed seem to more disproportionately afflict African-Americans than it does in states that did not cut their duration of jobless benefits (as shown in the bottom row of data). Conversely, long-term unemployment is actually less disproportionately borne by Latinos in each of the eight states that reduced UI durations relative to the rest of the country.

All in all, we think the evidence on UI duration cutbacks strongly argues that longer-run determinants of states' generosity in safety-net programs is a much better predictor of cutbacks than any extraordinary fiscal stress imposed on these states by the UI system following the Great Recession.

Did cutting duration work in fiscal terms?

Regardless of a state's *rationale* for cutting the maximum number of weeks available for recipients of unemployment benefits, it is essential to determine the *effectiveness* of the policy. Like any public policy decision, cutting UI duration has costs and benefits. In this case, costs are borne by UI recipients who would otherwise receive additional weeks of unemployment support, and benefits are afforded to taxpayers (employers, but also employees who ultimately pay the tax in the form of reduced paychecks) who would see their FUTA and SUTA tax liability decline in response to the money saved.¹²

To perform such analysis, it is essential to determine the amount of money saved by cutting benefit duration to see if it is worth the cost borne by those cut off from benefits earlier. Upon request, Department of Labor staff

TABLE 3

Labor force share and long-term unemployed by race and ethnicity in states that cut duration of unemployment benefits following the Great Recession, 2013

	Share of labor force			Share of long-term unemployed			Difference (percent of long-term unemployed minus percent of labor force)		
	White	African American	Latino	White	African American	Latino	White	African American	Latino
<i>Arkansas</i>	74.90%	14.00%	6.80%	48.70%	42.80%	4.10%	-26.23	28.77	-2.66
<i>Florida</i>	58.40%	14.60%	22.80%	45.50%	27.70%	23.80%	-12.92	13.1	1.04
<i>Georgia</i>	56.10%	30.90%	7.20%	35.00%	58.30%	2.60%	-21.15	27.45	-4.62
<i>Illinois</i>	67.20%	12.40%	14.40%	51.40%	28.70%	15.80%	-15.82	16.31	1.4
<i>Michigan</i>	79.40%	12.20%	3.90%	62.90%	29.00%	5.30%	-16.49	16.76	1.35
<i>Missouri</i>	83.20%	10.00%	2.70%	73.30%	18.30%	3.10%	-9.9	8.32	0.4
<i>North Carolina</i>	64.00%	20.90%	8.90%	52.20%	35.20%	8.60%	-11.77	14.32	-0.3
<i>South Carolina</i>	67.10%	25.90%	4.00%	51.10%	41.90%	1.80%	-16.04	15.96	-2.19
<i>Population weighted U.S. average (excluding states that reduced UI duration)</i>	64.70%	9.50%	17.30%	51.20%	19.00%	20.50%	-13.52	9.52	3.19

Source: Authors' analysis of Current Population Survey basic monthly microdata

provided EPI with quarterly data indicating how many UI recipients exhausted their benefits during that quarter, and at what week the exhaustion occurred. (As mentioned previously, the vast majority of states employ a sliding scale based on a recipient's work history to determine how many weeks he or she is eligible to receive benefits). We present this data in **Table 4**. The table leaves out Illinois, whose reduction of benefits from 26 weeks to 25 weeks for 2012 (but not 2013) did not appear in U.S. Department of Labor data; and North Carolina, whose law went into effect July 1, 2013—too recently for the full fiscal effect to have shown up in the available data.

Based on this data, it is possible to extrapolate how many people were affected by the shortened duration. For example, South Carolina reduced the number of weeks of UI benefits available to 20 from 26, effective June 14, 2011. Because the law affected only those who started receiving UI benefits after this date, there was not a drop-off of recipients exhausting their benefits after 26 weeks (as opposed to after fewer weeks) until the fourth quarter of 2011. During the third quarter of 2011, 7,030 South Carolinians exhausted their benefits after 26 weeks; in the fourth quarter, the number was 5,706. By the third quarter of 2012, zero recipients exhausted benefits after 26 weeks; the longest duration for all who exhausted their benefits was 20 weeks.

TABLE 4

Estimate of fiscal savings of states from unemployment insurance duration cutbacks

State	Quarters of duration cut*	Total saved by cutting duration	Total taxable wages over period	Savings as percentage of state's taxable wages	Covered workers at beginning of period of shortened duration	Estimated savings per covered worker per week	Average weekly UI benefit**
Arkansas	8	\$7,279,000	\$23,184,313,000	0.031%	1,121,000	\$0.06	\$289.17
Florida	6	\$97,779,000	\$70,529,079,000	0.139%	7,096,000	\$0.18	\$231.82
Georgia	5	\$63,754,000	\$37,046,517,000	0.172%	3,790,000	\$0.26	\$240.16
Michigan	7	\$243,658,000	\$47,300,496,000	0.515%	3,901,000	\$0.69	\$291.79
Missouri	9	\$161,038,000	\$55,757,513,000	0.289%	2,562,000	\$0.54	\$240.18
South Carolina	9	\$86,804,000	\$37,731,024,000	0.049%	1,761,000	\$0.42	\$244.58
Average weighted by duration and number of covered workers						\$0.37	\$251.61

*This column shows the number of calendar-year quarters that duration cut was in effect (through 2013).

**Average weekly benefit over the quarters of duration cut (throughout 2013).

Note: This analysis leaves out Illinois, whose reduction of benefits from 26 weeks to 25 in 2012 did not appear in U.S. Department of Labor data, and also North Carolina, whose law went into effect on July 1, 2013, too recent to be reflected in the data.

Source: Authors' analysis of data provided by Department of Labor staff and U.S. Department of Labor *Unemployment Insurance Data Summary*

By taking the quarterly average (since 2009) of the share of exhaustions that took place in a given week, we construct a proxy for how many people *would have* received benefits in weeks 20–26 if the policy had not changed. By multiplying by the average weekly benefit amount, we then estimate how much a state saved by cutting the duration of benefits.

As we show in Table 4, states that cut the duration of their unemployment insurance benefits saved very little money by doing so, relative to the amount of taxable wages in each state (that is, wages within the state's taxable base for SUTA taxes), or to how much an average covered employee's associated SUTA tax bill would have increased in the absence of the cuts, holding these states' UTF account balances equal. One way to frame the com-

parison is to weigh the foregone \$252 per week (the weighted average weekly benefit across the six states analyzed above) for the long-term unemployed (people generally in economically fragile circumstances) against the roughly *37 cents* per employee per week in SUTA taxes avoided due to the duration cut (the savings per covered worker in the six states ranged from \$0.06 to \$0.69 per week).

This kind of calculus is what lies beneath the judgment made by O'Leary and Van Erden (2012) in their survey of various policy proposals' potential impact on UI recipients: "Reducing the potential maximum duration of benefits to something less than 26 weeks ... is a draconian curtailment of benefit adequacy."

Finally, the duration cuts had an additional impact at the level of federal benefits. As the Congressional Research Service put it, “Since state UC benefit duration is an underlying factor in the calculation of duration for additional federal unemployment benefits, reducing UC maximum duration also reduces the number of weeks available to unemployed workers in the federal extended unemployment programs,” including the Emergency Unemployment Compensation and Extended Benefits programs, when they were in effect (Isaacs 2013). In this manner, by cutting benefit duration, states were turning down matched federal money for their citizens.

Impact of duration changes on state labor markets

While the cuts to the duration of unemployment benefits had little positive impact on states’ fiscal conditions, did they have a positive effect in boosting employment? To assess this, we simply compare changes in the employment-to-population ratio (EPOP) of prime-age workers (those between the ages of 25 and 54) before and after the policy changes went into effect in each state. Because the prime-age EPOP excludes people who are younger than 25 or older than 54, this measure is less likely to be affected by people who voluntarily choose not to work because they are enrolled in school or retired. It is important to stress that examining trends in employment, not unemployment, is much more relevant in examining the evidence for any beneficial impact of duration cutbacks on the labor market. Declines in unemployment can occur simply because people stop actively searching for work and become classified as not in the labor force. This would not constitute a policy victory—only an increase in employment growth can be taken as evidence that duration cuts have affirmatively helped a given state’s labor market.

A summary of the evidence is that there is very little sign that these duration cuts improved states’ labor markets. This is not surprising. For one, the academic research reviewed above argued that such cutbacks should not be

expected to improve labor market conditions. Further, all of the duration cuts—except for the North Carolina cuts in the middle of 2013—were quite modest. Finally, even the benefit cuts that led to cutbacks in federal EUC payments to North Carolina lasted only six months before the entire federal EUC program expired. This probably is too short a “treatment” period for reliable labor market effects to be assessed.

Evidence from state labor markets

All of the cuts to state UI duration went into effect after the national labor market was already showing signs of improvement, which makes it difficult to distinguish the effect of changes in UI duration from ongoing macroeconomic trends. **Figures G** through **N** confirm the relatively undramatic behavior of prime-age EPOPs before and after the duration cuts in each state. As these graphs show, the timing of reduced UI benefits was not correlated with any substantial improvement in the employment trend in these states over and above any improvement seen nationwide.

FIGURE G [VIEW INTERACTIVE on epi.org](#)

Arkansas prime-age employment-to-population ratio (EPOP), relative to U.S. prime-age EPOP, 2007–2014



Note: Shaded area denotes recession. Prime-age workers are those age 25–54.

Source: Authors' analysis of Current Population Survey basic monthly microdata

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FIGURE H [VIEW INTERACTIVE on epi.org](#)

Florida prime-age employment-to-population ratio (EPOP), relative to prime-age U.S. EPOP, 2007–2014



Note: Shaded area denotes recession. Prime-age workers are those age 25–54.

Source: Authors' analysis of Current Population Survey basic monthly microdata

ECONOMIC POLICY INSTITUTE

FIGURE I [VIEW INTERACTIVE on epi.org](#)

Georgia prime-age employment-to-population ratio (EPOP), relative to U.S. prime-age EPOP, 2007–2014



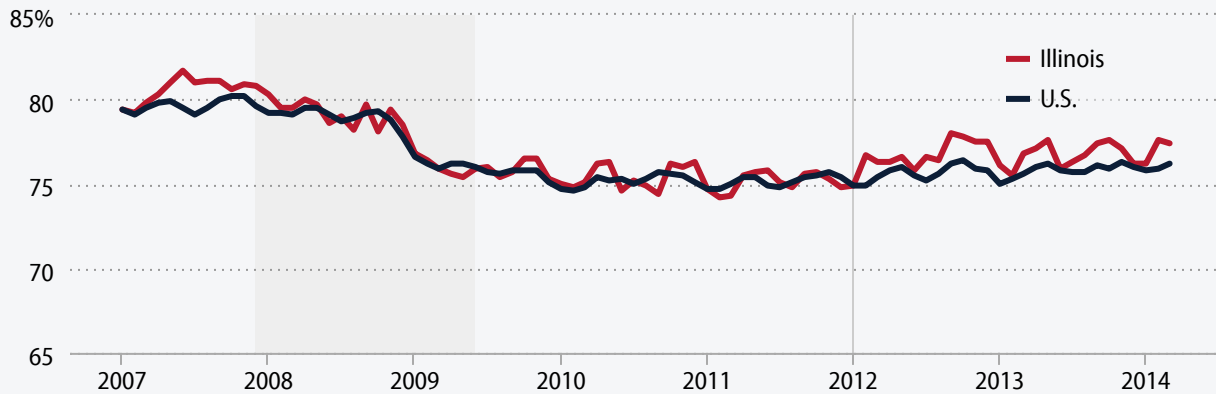
Note: Shaded area denotes recession. Prime-age workers are those age 25–54.

Source: Authors' analysis of Current Population Survey basic monthly microdata

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FIGURE J [VIEW INTERACTIVE on epi.org](#)

Illinois prime-age employment-to-population ratio (EPOP) relative to U.S. prime-age EPOP, 2007–2014



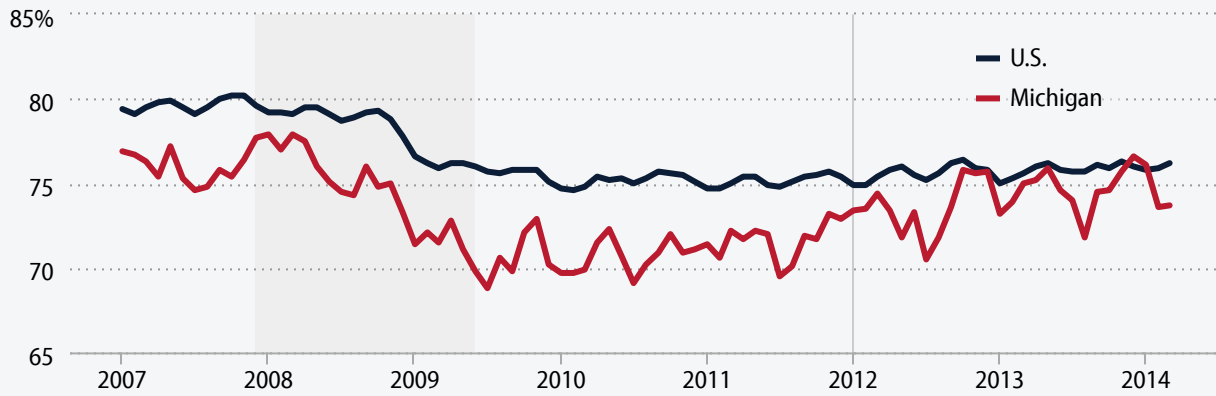
Note: Shaded area denotes recession. Prime-age workers are those age 25–54.

Source: Authors' analysis of Current Population Survey basic monthly microdata

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FIGURE K [VIEW INTERACTIVE on epi.org](#)

Michigan prime-age employment-to-population ratio (EPOP), relative to prime-age U.S. EPOP, 2007–2014



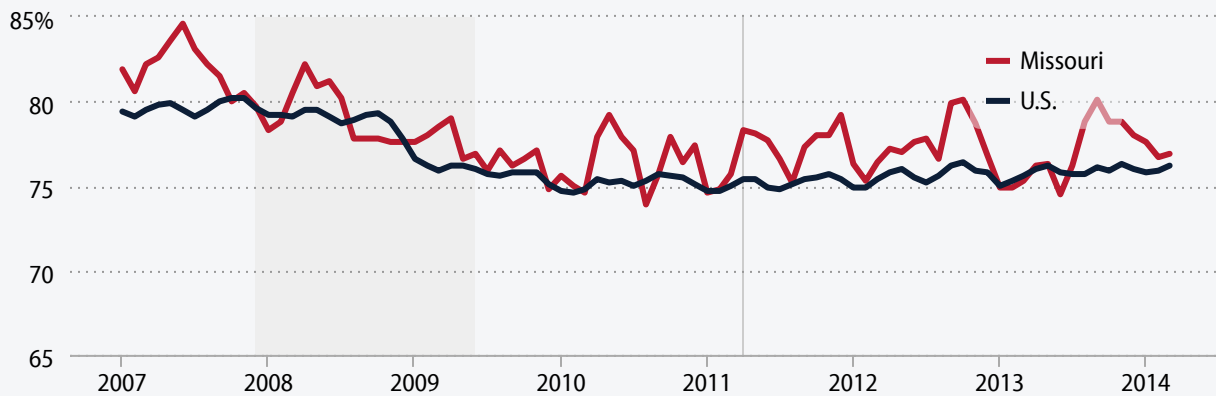
Note: Shaded area denotes recession. Prime-age workers are those age 25–54.

Source: Authors' analysis of Current Population Survey basic monthly microdata

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FIGURE L [VIEW INTERACTIVE on epi.org](#)

Missouri prime-age employment-to-population ratio (EPOP), relative to prime-age U.S. EPOP, 2007–2014



Note: Shaded area denotes recession. Prime-age workers are those age 25–54.

Source: Authors' analysis of Current Population Survey basic monthly microdata

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FIGURE M [VIEW INTERACTIVE on epi.org](#)

North Carolina prime-age employment-to-population ratio (EPOP), relative to prime-age U.S. EPOP, 2007–2014



Note: Shaded area denotes recession. Prime-age workers are those age 25–54.

Source: Authors' analysis of Current Population Survey basic monthly microdata

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FIGURE N [VIEW INTERACTIVE on epi.org](#)

South Carolina prime-age employment-to-population ratio (EPOP), relative to prime-age U.S. EPOP, 2007–2014



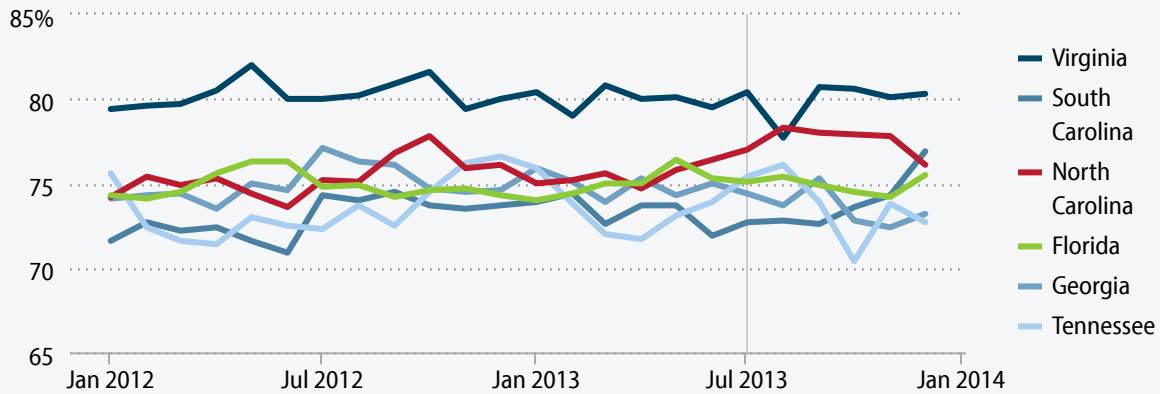
Note: Shaded area denotes recession. Prime-age workers are those age 25–54.

Source: Authors' analysis of Current Population Survey basic monthly microdata

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FIGURE O [VIEW INTERACTIVE on epi.org](#)

Prime-age employment-to-population ratios of North Carolina and surrounding states, 2012–2013



Note: Prime-age workers are those age 25–54.

Source: Authors’ analysis of Current Population Survey basic monthly microdata

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One plausible explanation for the absence of any large effects is that most states that reduced regular state UI duration were still eligible for federal Emergency Unemployment Compensation. That means unemployed workers could continue to receive UI benefits even after exhausting their regular state benefits. The one exception to this was the state of North Carolina, which forfeited its eligibility for EUC in July 2013 by reducing the amount of weekly benefits (without receiving a waiver from the federal government) in addition to reducing duration from 26 weeks to 19 weeks.

Did the large North Carolina cuts make a difference?

In order to determine whether the more drastic cuts in North Carolina had a significant impact on employment relative to other states, we compare North Carolina with five other nearby southern states. South Carolina, Florida, and Georgia each reduced regular state UI duration below 26 weeks prior to the change in North Carolina. Virginia and Tennessee both retained the 26-week maximum. Since Congress failed to extend federal EUC

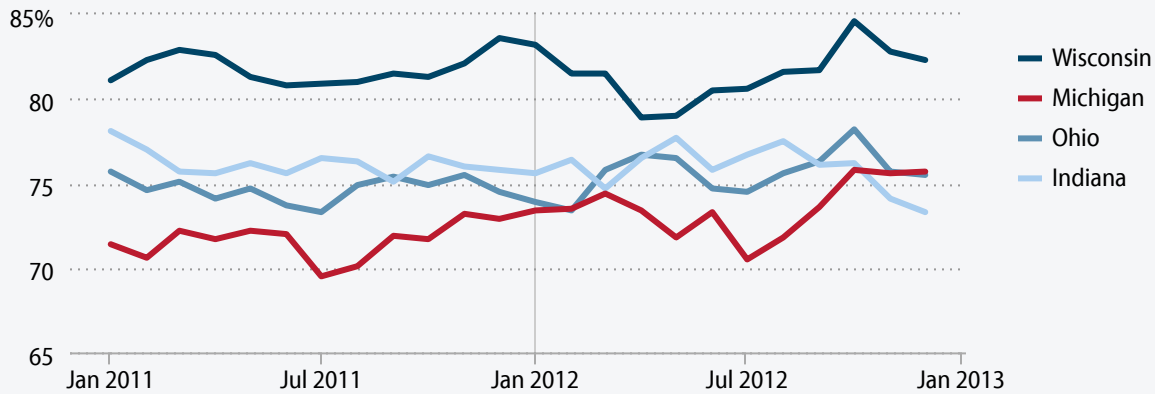
for all states at the end of 2013, the six-month period between July 2013 and December 2013 is most relevant for observing any impact of North Carolina’s especially sharp cuts.

Figure O presents monthly prime-age EPOP ratios for North Carolina and these other southern states from the start of 2012 through the end of 2013. As was shown in the previous graph tracking the North Carolina EPOP, the duration cut essentially happened *after* the state’s EPOP had already begun rising rapidly after March 2013. It rose for two more months before beginning a decline (gradual at first, and then more pronounced).

North Carolina’s EPOP began rising rapidly in the months prior to the duration cutback, began falling steadily just two months after the duration cutback, and differed very little in behavior after the cutback from EPOPs in surrounding states. This outcome provides little reason to believe that North Carolina’s cuts fundamentally improved the labor market in the state.

FIGURE P [VIEW INTERACTIVE on epi.org](#)

Prime-age employment-to-population ratios of Michigan and surrounding states, 2011–2012



Note: Prime-age workers are those age 25–54.

Source: Authors' analysis of Current Population Survey basic monthly microdata

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Looking at Midwestern states

Though the majority of states that reduced UI benefit duration were in the South, this policy change was also implemented in three Midwestern states—Michigan, Illinois, and Missouri. Illinois reduced duration by only one week, to 25 weeks from 26 weeks, and only during 2012, whereas Michigan and Missouri each reduced duration to 20 weeks. Of these three states, Michigan had the lowest rate of employment at the time the cut was made in January 2012, making it an ideal test case for the effectiveness of this policy shift. The impact of reduced UI duration in Midwestern labor markets is also an interesting contrast to Southern states because of differences in payroll employment trends. At the time of these policy

changes, payroll employment growth was accelerating in most Southern states while it was generally slowing in Midwestern states.

Figure P presents monthly prime-age EPOPs for Michigan and the surrounding states of Wisconsin, Ohio, and Indiana from the start of 2011 through the end of 2012. Much like the comparison of North Carolina with surrounding states, this chart shows that the duration cut happened several months after Michigan's EPOP had been steadily rising. And again, there is little evidence that the rate of improvement in the labor market was any better after the change than before.

Conclusion

The effect of unemployment insurance and UI benefit extensions during periods of labor market slack in the U.S. economy is a very well-researched empirical topic. The preponderance of evidence from the research literature is that policymakers should expect little benefit—and possibly significant harm—from reducing the duration of UI benefits during periods of labor market weakness. Despite this well-grounded finding, eight states cut the maximum duration of unemployment benefits ostensibly to move their Unemployment Trust Fund accounts closer to solvency. However, these states' Unemployment Trust Fund accounts were not in a measurably worse fiscal position than other state UTF accounts that also became insolvent following the Great Recession. Moreover, our analysis shows that cutting the duration of benefits saved these states relatively small amounts of money—money that could have been made up by tax increases on the order of a fraction of a percent.

While cutting benefit duration did little to improve state UTF accounts, the other method to try to achieve solvency—raising SUTA taxes—is likewise inadvisable during a recession, as these taxes are, for the most part, passed on to employees in the form of leaner paychecks, leading to a decrease in consumer demand at a time when demand is most needed.

Instead, states must update their UTF account financing systems so that they more reliably lead to robust trust fund accounts during economic expansions. They can do this by following best practices, such as increasing the taxable wage base (thus making the SUTA tax more progressive), raising the tax rate for new businesses (before “experience rating”¹³ kicks in), and providing a wider range of possible tax rates. And while similar recommendations have been made—including by a bipartisan blue ribbon commission in 1994¹⁴—the Great Recession showed the urgency of the problem at hand. Only by building trust fund reserves during good times will states prevent mass UTF account insolvencies during bad

times. Cutting benefits when they are needed most will not bring trust fund accounts back to solvency.

Cutting the duration of benefits also did little to boost employment in these states. For states that reduced duration, there was little or no shift in the overall trend in employment of the prime-age working population (age 25 to 54). Relative to surrounding states that made no change in duration or enacted much smaller changes, there were some improvements in employment, but it is not clear that these changes were the direct result of the policy change rather than other macroeconomic conditions. What is clear, however, is that the burden of benefit cuts in these states is not equally shared: In each of the states that cut the duration of benefits, African Americans were overrepresented among the long-term unemployed, accounting for a higher share of such workers than their share of the state labor force.

—The authors thank the Peter G. Peterson Foundation for financial support for this work; Matt Gardner at the Institute on Taxation and Economic Policy and (especially) Robert Pavosevich at the U.S. Department of Labor for providing critical data; and, at EPI, Alyssa Davis for research assistance, Lora Engdahl for editing, and Yesica Zuniga for publication layout.

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Endnotes

1. The state UI programs and their variations are myriad and labyrinthine; this section serves only to provide as much information as necessary to delve into the question of why certain states cut their UI benefits, and whether those cuts made budgetary sense. For a more detailed account of how the federal-state UI program works, access the many reference materials available from the Department of Labor, Center on Budget and Policy Priorities, and Congressional Research Service.
2. The maximum duration depended upon the unemployment rate in the state in which a recipient resided. See U.S. Department of Labor (2013).

3. Since Congress allowed EUC08 to expire in December 2013, congressional Democrats and EPI (see Mishel and Shierholz 2013) have been advocating for its extension.
4. "Some states borrow from sources outside the UTF and thus are not subject to the loan restrictions described below but rather are subject to the terms within that outside loan agreement" (Whittaker 2012). Whittaker (2012) also noted that ARRA waived the interest requirement through 2010.
5. The difference is even starker when looking not at AHCM ratios, but rather the trust fund balance as a percentage of total wages with a state. Under this metric, all 15 states (plus Washington, D.C., and Puerto Rico) whose UTF accounts never went bust in the recession ranked in the top 22 in 2007; all eight states that cut UI benefit duration ranked in the bottom half, including five of the bottom 13.
6. Typically, states exclude certain classes of workers from both paying into the UI system and receiving benefits. These classes tend to include most students, some salespeople, elected officials, corporate officers, and others.
7. There are several other UTF account funding mechanisms common among states that had accounts that never became insolvent in the aftermath of the recession, including an expanded wage base relative to FUTA, higher taxes on new employers than in other states, and a broader tax range based on employers' use of the UI system.
8. Examples of funding mechanisms that adjust automatically with UTF account solvency can be found in tables 2-10 and 2-11 in U.S. Department of Labor (2014).
9. However, while some states offer the same number of weeks (still typically 26) of benefits to all UI recipients, most states operate with a sliding scale in which many recipients qualify for fewer than the maximum of number due to "uneven earnings or a brief work history" (Chen and Stone 2013).
10. The Department of Labor calculates this "adequate financing rate" "by taking the average benefit cost rate plus a solvency amount. The average benefit cost rate is equal to the average of the previous ten calendar year ratios of total benefits paid to total taxable wages. The solvency amount is equal to the difference between the state's current Trust Fund Balance, including outstanding advances as of Jan. 1, and the Trust Fund Balance needed to have an AHCM of

1.0, divided by five, divided by taxable wages. (For states above a 1.5 AHCM a negative solvency amount (subtracted from benefit costs) is included equal to the amount that the trust fund exceeds the trust fund balance needed to have a 1.0 AHCM, divided by 5, divided by taxable wages)” (U.S. Department of Labor 2012).

11. African American state population shares come from the U.S. Census Bureau (Rastogi et al. 2011) and the status of Medicaid expansion by state come from the Kaiser Family Foundation (2014). Indiana, Pennsylvania, and Utah are excluded from these averages because Kaiser lists the coverage expansion as under “open debate” in those states.
12. Researchers generally agree that a significant portion of the cost of the payroll tax is passed on to employees in the form of lowered wages.
13. As the Congressional Research Service puts it, all states set their SUTA tax rate “based on the amount of UC paid to former employees. Generally, the more UC benefits paid to its former employees, the higher the tax rate of the employer, up to a maximum established by state law. The experience rating is intended to ensure an equitable distribution of UC program taxes among employers in relationship to their use of the UC program, and to encourage a stable workforce.” See Whittaker and Isaacs (2014).
14. See: Advisory Council on Unemployment Compensation (1996).

References

Advisory Council on Unemployment Compensation. 1996. *Collected Findings and Recommendations: 1994-1996*.

http://www.ows.doleta.gov/dmstree/misc_papers/advisory/acuc/collected_findings/adv_council_94-96.pdf

Card, David, Raj Chetty, and Andrea Weber. 2007. “The Spike at Benefit Exhaustion: Leaving the Unemployment System or Starting a New Job?” *American Economic Review*, vol. 97(2), 113–118. <http://www.nber.org/papers/w12893>

Center on Budget and Policy Priorities. 2014. *Policy Basics: State Earned Income Tax Credits*. <http://www.cbpp.org/cms/?fa=view&cid=2506>

Chen, William, and Chad Stone. 2013. *Introduction to Unemployment Insurance*. Center on Budget and Policy Priorities. <http://www.cbpp.org/cms/index.cfm?fa=view&cid=1466>

Chetty, Raj. 2008. “Moral Hazard versus Liquidity and Optimal Unemployment Insurance.” *Journal of Political Economy*, vol. 116(2), 173–234. <http://www.nber.org/papers/w13967>

Current Population Survey basic monthly microdata. Various years. Survey conducted by the Bureau of the Census for the Bureau of Labor Statistics [machine-readable microdata file]. Washington, D.C.: U.S. Census Bureau.

Dalesio, Emery P. 2013. “North Carolina Dropped From Federal Unemployment Program.” *Associated Press*. June 28. http://www.huffingtonpost.com/2013/06/28/north-carolina-unemployment_n_3515448.html

Evangelist, Mike. 2013. *One-Two Punch: As States Cut Unemployment Benefit Weeks, Jobless Also Lose Federal Aid, Even as Jobs Remain Scarce*. National Employment Law Project. http://nelp.3cdn.net/115f0e07e648c2397d_p4m6b3rnj.pdf

Farber, Henry S., and Robert G. Valletta. 2013. *Do Extended Unemployment Benefits Lengthen Unemployment Spells? Evidence from Recent Cycles in the U.S. Labor Market*. National Bureau of Economic Research, Working Paper No. 19048. <http://www.nber.org/papers/w19048>

Gais, Thomas, Lucy Dadayan, and Suho Bae. 2009. *The Decline of States in Financing the U.S. Safety Net: Retrenchment in State and Local Safety Net Spending, 1977-2007*. Rockefeller Institute of Government. http://www.rockinst.org/pdf/workforce_welfare_and_social_services/sws.pdf

Hagedorn, Marcus, Fatih Karahan, Iourii Manovskii, and Kurt Mitman. 2013. *Unemployment Benefits and Unemployment in the Great Recession: The Role of Macro Effects*. National Bureau of Economic Research, Working Paper No. 19499. <http://www.nber.org/papers/w19499>

Henchman, Joseph. 2011. *Unemployment Insurance Taxes: Options for Program Design and Insolvent Trust Funds*. The Tax Foundation. <http://taxfoundation.org/article/unemployment-insurance-taxes-options-program-design-and-insolvent-trust-funds>

Institute on Taxation and Economic Policy. 2013. *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States*. Washington, D.C.: ITEP. <http://www.itep.org/pdf/whopaysreport.pdf>

Isaacs, Katelin P. 2013. *Unemployment Insurance: Consequences of Changes in State Unemployment Compensation Laws*. Washington, D.C.: Congressional Research Service. <http://www.fas.org/sgp/crs/misc/R41859.pdf>

Kaiser Family Foundation. 2014. *Status of State Action on the Medicare Expansion Decision, 2014*. <http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/>

Kliff, Sarah. 2014. "Is Obamacare Available in All States?" *Vox.com*. May 15. <http://www.vox.com/cards/obamacare/is-obamacare-available-in-all-states>

Mishel, Lawrence, and Heidi Shierholz. 2013. *Labor Market Will Lose 310,000 Jobs in 2014 if Unemployment Insurance Extensions Expire*. Economic Policy Institute, Issue Brief #371. <http://www.epi.org/publication/labor-market-lose-310000-jobs-2014-unemployment/>

National Conference of State Legislatures. n.d. *Partisan Composition*. <http://www.ncsl.org/research/about-state-legislatures/partisan-composition.aspx>

National Conference of State Legislatures. 2010. *Medicaid and CHIP Eligibility Table by State*. <http://www.ncsl.org/research/health/medicaid-eligibility-table-by-state-state-activit.aspx>

National Employment Law Project. 2013. *Share of Unemployed Receiving Jobless Aid Will Hit Record Low If Congress Fails to Renew Federal Unemployment Insurance*. <http://www.nelp.org/page/-/UI/2013/Issue-Brief-Record-Low-Share-Unemployed-Receiving-Jobless-Aid-Renew-EUC.pdf?nocdn=1>

O'Leary, Christopher J., and James Van Erden. 2012. *North Carolina's Unemployment Insurance System: A Simulation and Policy Analysis*. Report prepared for North Carolina Department of Commerce, Division of Employment Security. <http://research.upjohn.org/reports/203>

Rastogi, Sonya, Tallese D. Johnson, Elizabeth M. Hoeffel, and Malcolm P. Drewery, Jr. 2011. *The Black Population: 2010*.

U.S. Census Bureau. <http://www.census.gov/prod/cen2010/briefs/c2010br-06.pdf>

Rothstein, Jesse. 2011. "Unemployment Insurance and Job Search in the Great Recession." *Brookings Papers on Economic Activity*, vol. 43 (Fall), 143–213. <http://www.nber.org/papers/w17534>

Shoag, Daniel. 2012. *The Impact of Government Spending Shocks: Evidence on the Multiplier from State Pension Plan Returns*. Harvard University. http://www.people.fas.harvard.edu/~shoag/papers_files/shoag_jmp.pdf

Tax Policy Center. 2013a. *State and Local Tax Revenue, Per Capita*. <http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=523>

Tax Policy Center. 2013b. *State and Local Direct General Expenditures, Per Capita*. <http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=523>

U.S. Department of Labor. 2012. *Significant Measures of State Unemployment Insurance Tax Systems*. <http://workforcesecurity.doleta.gov/unemploy/pdf/sigmeasuitaxsys11.pdf>

U.S. Department of Labor. 2013. *Emergency Unemployment Compensation 2008 (EUC) Program*. <http://www.workforcesecurity.doleta.gov/unemploy/pdf/euc08.pdf>

U.S. Department of Labor. 2014. *Comparison of State Unemployment Insurance Laws, Chapter 2: Financing*. <http://workforcesecurity.doleta.gov/unemploy/pdf/uilawcompar/2014/financing.pdf>

U.S. Department of Labor. n.d. *Unemployment Insurance Chartbook*, Tables B5, B7, and B11. <http://www.ows.doleta.gov/unemploy/chartbook.asp>

U.S. Department of Labor. n.d. *Unemployment Insurance Data Summary*. <http://www.ows.doleta.gov/unemploy/content/data.asp>

U.S. Government Accountability Office. 2010. *Unemployment Insurance Trust Funds: Long-standing State Financing Policies*

Have Increased Risk of Insolvency. <http://www.gao.gov/products/GAO-10-440>

Valletta, Robert G., and Katherine Kuang. 2010. "Extended Unemployment and UI Benefits." Federal Reserve Bank of San Francisco. <http://www.frbsf.org/economic-research/publications/economic-letter/2010/april/extended-unemployment-insurance-benefits/>

Vroman, Wayne. 2010. *The Role of Unemployment Insurance as an Automatic Stabilizer During a Recession.* Impaq International, LLC. http://wdr.doleta.gov/research/FullText_Documents/ETAOP2010-10.pdf

Whittaker, Julie. 2012. *The Unemployment Trust Fund (UTF): State Insolvency and Federal Loans to States.* Congressional Research Service. <http://www.fas.org/sgp/crs/misc/RS22954.pdf>

Whittaker, Julie M., and Katelin P. Isaacs. 2013. *Extending Unemployment Compensation Benefits During Recessions.* Congressional Research Service. <http://www.fas.org/sgp/crs/misc/RL34340.pdf>

Whittaker, Julie M., and Katelin P. Isaacs. 2014. *Unemployment Insurance: Programs and Benefits.* Congressional Research Service. <http://fas.org/sgp/crs/misc/RL33362.pdf>

Wilus, Ronald. 2010. "State UI Taxes and Trust Fund Solvency." Presentation at the National UI Issues Conference, Chicago, June 22. Cited in Chen, William, and Chad Stone. 2013. *Introduction to Unemployment Insurance.* Center on Budget and Policy Priorities. <http://www.cbpp.org/cms/index.cfm?fa=view&id=1466>