

# Recommendations for states facing budget shortfalls

Focus on Connecticut

**Policy Memo** • By [Josh Bivens](#) • May 8, 2017

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The first half of each year is state budget season across much of the United States. This policy memo is intended to provide information and evidence to state legislators and governors as they debate the optimal mix of taxes, spending, and investment in their states for the coming year.

We first look at the national economic context within which states must navigate and provide a few key recommendations for making state-level budget decisions within that context. We then examine key indicators for one specific state—Connecticut—to see how its mix of spending and taxes follows or departs from these key recommendations.

**Key national findings are:**

- A full nine years after the start of the Great Recession, the U.S. economy remains damaged due to a shortfall in spending by households, governments, and businesses (“aggregate demand”) relative to the economy’s productive capacity. This shortfall in demand can be seen in measures of labor market health (such as the share of prime-age adults with a job, or rates of nominal wage growth) that remain far below pre–Great Recession levels.
- The culprit for this slow recovery is easy to identify: spending austerity by governments. If public spending by all levels of government had followed the same trajectory since the end of the Great Recession as the trajectory followed during previous recoveries, the U.S. economy would have reached full employment long ago.
- Crucially for state governments, state and local spending has been the prime driver of this austerity. State and local spending has grown more slowly over the current recovery than over any other previous recovery.
- While states are generally bound by law to balance their budget, the economic impact of spending cuts is more damaging to near-term state economic growth than are tax increases, and spending cuts are far more damaging than *progressive* tax increases (tax hikes on

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high-income households or corporations).

- A growing literature highlights the crucial importance of public investment in spurring economy-wide productivity growth over the longer term. Productivity growth (or the income generated in an average hour of work in the economy) provides the ceiling on how fast potential living standards can rise. State and local governments provide the bulk of public investment (including infrastructure) in the U.S. economy. This makes state and local decisions about the level of public investment effort crucial for wider economic performance.
- Fears that raising revenue from high-income households will lead to massive out-of-state migration are hugely overblown and are not supported by the highest-quality and most up-to-date economic research.
- Finally, there is room to increase the revenues that state and local governments collect from the business and corporate sectors without damaging economic growth. Pursuing a strategy of cutting corporate rates to spur growth and cutting spending to finance these cuts is depressingly common. The evidence that corporate rate cuts will appreciably spur growth is weak, and the evidence that cutting spending will damage growth is strong. Closing loopholes in the business tax code can raise revenue from the business sector without raising the rates they face.

**Key recommendations for states facing budget shortfalls:**

- Favor tax increases, and particularly progressive tax increases, over spending cuts.
- Close loopholes in the business tax code to raise additional revenue from the business sector without raising rates.
- Increase (rather than cutting) spending on public investment, K–12 education, and higher education to spur longer-term economic growth.

**Regarding Connecticut, we find that:**

- Connecticut spending on public investment and K–12 education per pupil have held up better than national averages, but the state has still cut back on the share of inflation-adjusted resources devoted to these crucial investments since 2000.
- Connecticut ranks 45th among states in state support for higher education, even though it is clear that increased investments in higher education would *help* the state’s fiscal situation over the long run. The fiscal 2017 budget actually saw a \$33.5 million decline in higher education spending (Thomas 2017).
- As a share of gross state product (GSP), capital outlays (or investment) in Connecticut in 2014 were in the lowest fifth of all states.
- Overall, Connecticut taxes as a share of state personal income are lower than the national average, and this share has taken longer to bounce back from the Great Recession than it did from previous economic recessions.
- Connecticut has ample room to raise more revenue from its business sector. Measured as a share of GSP, Connecticut is tied for the most lightly taxed state in the nation. Connecticut also relies less on business taxes for overall revenue than any

other state in the nation.

- Raising the top marginal tax rate by just 0.5 percentage points would boost state tax revenues by more than \$200 million annually. Increases substantially larger than this would still leave Connecticut's top tax rate below that of New Jersey and New York.
- Other steeply progressive revenue sources—such as joining a state compact with New York, New Jersey, and Massachusetts to close the carried interest loophole—would similarly raise significant amounts of revenue for Connecticut. Closing the carried interest loophole alone would likely raise \$535 million.
- In short, Connecticut has ample room to move further toward a state budget that strengthens public investment and other vital forms of state and local spending and that funds these investments with progressive revenue sources, including more revenue from the business sector.
- If state spending were boosted by \$2 billion annually in coming years, this could move the share of the state budget directed toward children close to the 40 percent target highlighted by Connecticut Voices for Children (Thomas 2017) without cutting spending in other areas of the budget. This spending target would also completely undo proposed cuts in the governor's proposed fiscal year 2018 budget.<sup>1</sup>
- This level of state spending, if financed by progressive revenue sources, would boost economic output in the state by roughly \$2.2 billion and would boost the number of jobs statewide by 150,000 in the coming years.
- This high-investment strategy, financed by progressive revenue sources, would also bring greater long-run stability to the Connecticut budget. This is true because of the long-run beneficial impact on the state fiscal situation stemming from educational investments. It is also due to the stronger state economy that would result from a high-investment strategy with sources of aggregate demand that are more predictable and stable than the consumption decisions of high-income households.
- In the longer run, Connecticut can help to *stabilize* state spending over the business cycle by broadening the base of the state sales tax (including sales tax collections on Internet sales) and by instituting rules that protect the Budget Reserve Fund from opportunistic tax-cutting during times of relatively prosperity and high tax collections.

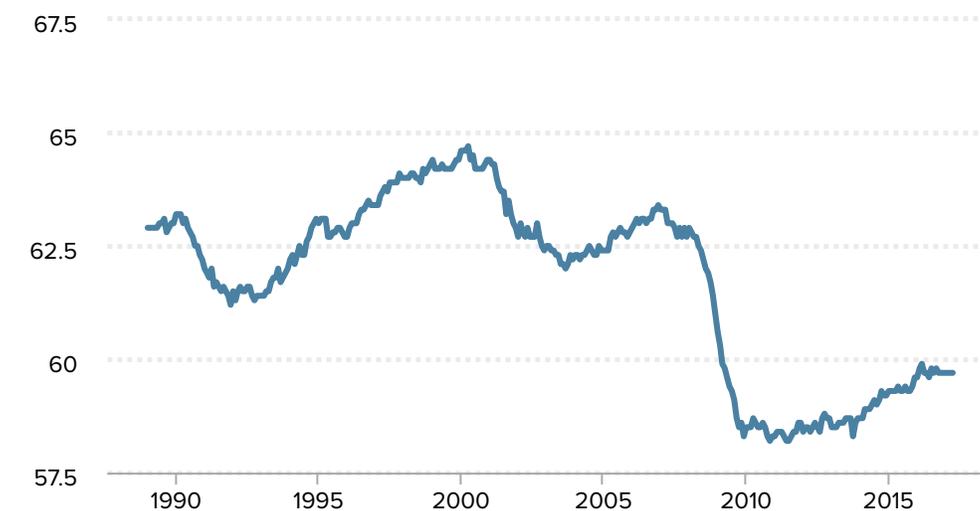
## The national economic situation

The economic recovery from the Great Recession remains incomplete. While the headline unemployment rate has nearly returned to pre Great Recession levels, broader measures of labor market health like the share of prime-age adults with a job (the employment-to-population ratio, or the “EPOP”) have not, as shown in **Figure A**.

Further, nominal wage growth—the most telling bottom-line indicator of whether or not there remains “slack” in the labor market—has ticked up a bit over the past year but remains far below what it should be in a healthy economy, as shown in **Figure B**.<sup>2</sup> In short, seven-and-a-half years into recovery from the Great Recession, there remains substantial

Figure A

## Employment-to-population ratio of workers age 25–54, 1989–2017



**Source:** EPI analysis of Bureau of Labor Statistics Current Population Survey public data (BLS various years)

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slack in the labor market, and growth has not been fast enough to both work off this slack and absorb new labor market entrants.

The culprit for this slow growth is clear: spending austerity at all levels of government. The labor market slack highlighted earlier shows clearly that the economy suffers from a shortfall of aggregate demand (spending by households, businesses, and governments) relative to the economy’s productive capacity. This shortfall of demand has kept resources (including willing workers) idle for much of the past decade. The most conspicuous source of aggregate demand weakness since 2011 has been slow growth in public spending.

This overall public spending austerity has been driven largely by spending of state and local governments.<sup>3</sup> **Figure C** shows the growth in real state and local government spending over the past four recoveries. If the spending of state and local governments following the Great Recession had followed the same trajectory it did after the steep early 1980s recession, state and local governments would be spending \$400 billion more today, and full employment would have been reached years ago.

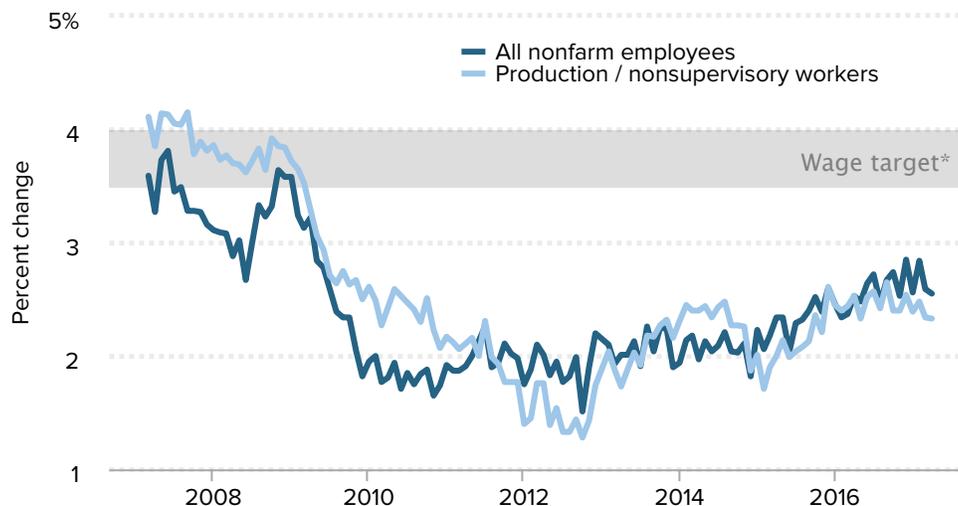
## State and local spending austerity is a policy choice, not an inevitability

Because the federal government can run deficits for sustained periods with little economic harm, it is less constrained in its ability to sustain or increase spending during periods of economic weakness (including spending on grants to state and local governments). This

Figure B

## Nominal wage growth has been far below target in the recovery

Year-over-year change in private-sector nominal average hourly earnings, 2007–2017



\*Nominal wage growth consistent with the Federal Reserve Board's 2 percent inflation target, 1.5 percent productivity growth, and a stable labor share of income.

Source: EPI analysis of Bureau of Labor Statistics Current Employment Statistics public data series (BLS various years)

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means that federal policymakers bear more of the blame for the decision to embrace austerity than do their peers in states. However, this should not let state and local governments entirely off the hook. While state governments are generally bound by law to balance annual budgets, they can choose whether or not to do this with tax increases or spending cuts. By and large over the past nine years they have chosen to rely far too heavily on spending cuts.

A 2001 letter co-written by Nobel economist Joseph Stiglitz (Orszag and Stiglitz 2001) puts this clearly:

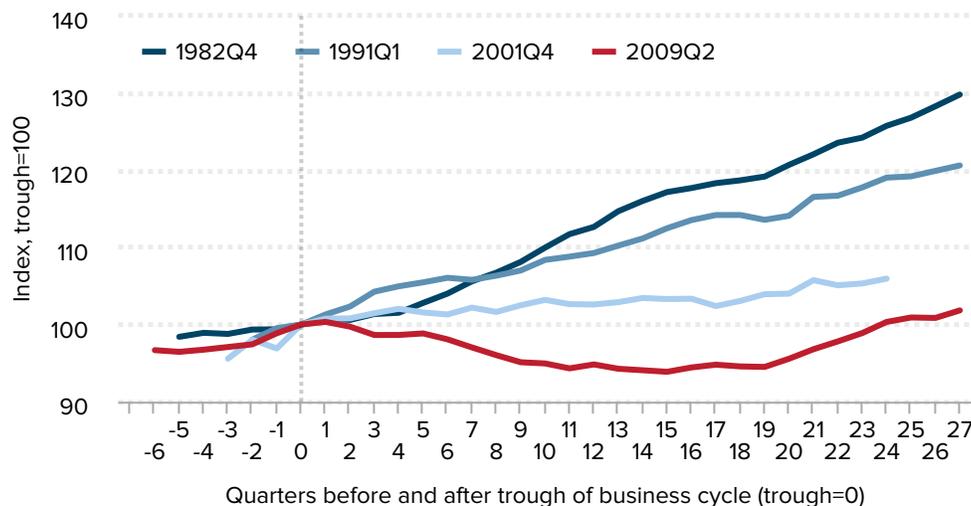
Basic economy theory suggests that direct spending reductions will generate *more* adverse consequences for the economy in the short run than either a tax increase or a transfer program reduction. The reason is that some of any tax increase or transfer payment reduction would reduce saving rather than consumption, lessening its impact on the economy in the short run, whereas the full amount of government spending on goods and services would directly reduce consumption.

...The more that the tax increases or transfer reductions are focused on those with lower propensities to consume (that is, on those who spend less and save more of each additional dollar of income), the less damage is done to the weakened economy. Since higher-income families tend to have lower propensities to consume

Figure C

## State and local spending austerity explains slow recovery from Great Recession

Growth in inflation-adjusted spending by state and local governments following last four recessions



**Notes:** This figure describes total state and local government spending. Government consumption and investment expenditures are deflated with the NIPA price deflator. Government transfer payments are deflated with the price deflator for personal consumption expenditures.

**Source:** EPI analysis of Bureau of Economic Analysis National Income and Product Accounts public data (BEA various years)

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than lower-income families, the least damaging approach in the short run involves tax increases concentrated on higher-income families. Reductions in transfer payments to lower-income families would generally be more harmful to the economy than increases in taxes on higher-income families, since lower-income families are more likely to spend any additional income than higher-income families.

This general argument—that spending cuts weigh down growth more heavily during times of demand weakness than tax increases do—has been buttressed by several studies comparing the “bang for buck” of various tax and spending changes in spurring (or dragging on) economic growth during times when the economy continues to have productive slack.

Bivens (2011) collects a number of estimated “multipliers” of tax and spending changes, and these are reproduced in **Table 1**. The multiplier measures how much economy-wide output changes in response to a \$1 change in either taxes or spending. The multipliers gathered are largely for federal policy changes, but they map directly onto state and local equivalent changes. So, for example, both public and private forecasters estimate that each \$1 *cut* in progressive taxes will boost economic output by \$0.30 to \$0.40. But each \$1 in spending *increases* in transfers directed toward lower-income households (such as unemployment insurance or Medicaid), government consumption, and government

Table 1

## Fiscal stimulus bang for the buck

Output multiplier from various types of fiscal policy changes

Tax cuts	Bang for the buck
<b>Temporary tax cuts</b>	
<i>Nonrefundable lump-sum tax rebate</i>	1.01
<i>Refundable lump-sum tax rebate</i>	1.22
<i>Payroll tax holiday</i>	1.23
<i>Job tax credit</i>	1.29
<i>Across-the-board tax cut</i>	1.03
<i>Accelerated depreciation</i>	0.25
<i>Loss carryback</i>	0.24
<i>Housing tax credit</i>	0.88
<b>Permanent tax cuts</b>	
<i>Extended alternative minimum tax patch</i>	0.50
<i>Make Bush income tax cuts permanent</i>	0.35
<i>Make dividend and capital gains tax cuts permanent</i>	0.39
<i>Cut in corporate tax rate</i>	0.32
<b>Spending increases</b>	
<i>Extending unemployment insurance benefits</i>	1.60
<i>Temporary federal financing of work-share programs</i>	1.69
<i>Temporary increase in food stamps</i>	1.72
<i>General aid to state governments</i>	1.41
<i>Increased infrastructure spending</i>	1.57
<i>Low-income home energy assistance program</i>	1.14

**Note:** The “bang for the buck” is estimated by the one-year dollar change in GDP for a given dollar reduction in federal tax revenue or increase in spending. Multiplier indicates how much total output (gross domestic product) changes in response to a \$1 increase in deficit resulting from the fiscal policy change.

**Source:** Zandi 2010, Table 4

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investment will boost economic output by about five times as much—between \$1.40 and \$1.70.<sup>4</sup> This logic also works in reverse: tax *increases* would drag on economic growth by much less than spending *cuts* would.

Several studies confirm that these macroeconomic multipliers hold even more strongly for measures that change spending at the state level.

Shoag (2013) estimates even larger multipliers specifically for state spending. To make

these estimates, he exploits the fact that some states receive positive or negative shocks to spending possibilities by the over- or underperformance of the pension funds they manage. Positive shocks to the returns earned by state pension funds tend to be spent by the state, and the result is a significant increase in state economic activity, on the order of a \$2 change in economic activity for every \$1 change in state spending.

Chodorow-Reich (2012) look at the effects of the increase in the federal matching payment for Medicaid that was included in the American Recovery and Reinvestment Act (ARRA). Because part of the formula for determining the state-specific size of this increase is unrelated to state economic conditions, it provides an excellent “exogenous shock” that can be correlated with subsequent employment growth to obtain a measure of the causal effect of state spending on economic outcomes. The effects of increases to Medicaid spending are startlingly large, with every \$100,000 in additional spending supporting 3.8 jobs, with 3.2 of these jobs being outside the health care sector.

Wilson (2014) similarly looks at another component of state aid from ARRA that was exogenous to state economic conditions—highway grants. He finds that each \$125,000 in these highway grants created one job. At first glance, this might sound expensive, but it’s actually a higher job/income ratio than exists economy-wide, making these investments comparatively efficient job-creation policy.

## **There are long-run benefits to productivity of increased public investment**

Besides putting less drag in the near term on economic recovery through their impact on aggregate demand, decisions to resist spending cuts will also pay off in the long term. A growing research literature has in recent years confirmed the high rates of return of public investment. This literature has particularly focused on the benefits of infrastructure investments, which in the United States are predominantly made at the state level (see Bivens [2012] for a review of some of this literature).

Essentially, each \$1 in infrastructure investment yields a rate of long-run return in the form of higher private-sector income of between \$0.10 and \$0.40. These are rates of return substantially higher than what prevails for private-sector investment, indicating that the political process has generally led to underinvestment in public goods in recent decades.

Evidence of this underinvestment also can be found outside of “core” infrastructure investments (“core” investments are those in transportation, utilities, and water management and treatment). Cellini, Ferreira, and Rothstein (2010), using high-quality research methods that allow one to isolate the purely causal effect of investments in school facilities, found that each \$1 in additional investment yielded a return of \$1.50 in California districts that undertook them. Besides boosting the capitalized value of homes, these school facility investments were also strongly associated with improved student performance.

Across all states, spending on public investments and educational spending have severely

Figure D

## Public investment is a clear casualty of state and local austerity

Real gross investment by state and local governments, 2000–2016



**Notes:** Values are indexed to 2009 annual average (2009=100).

**Source:** Author's analysis of Bureau of Economic Analysis National Income and Product Accounts public data (BEA various years)

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lagged over the past business cycle. **Figure D** shows gross investment by state and local governments in the latest recovery and compares this with previous recoveries.

**Figure E** shows inflation-adjusted state and local spending per public school pupil for K–12 students in recent years. The aftermath of the Great Recession was disastrous for this measure, as per pupil spending fell by 7 percent from 2007 to 2015. Recent years have seen the beginning of recovery, but the level remains substantially below pre–Great Recession peaks.

## Are there hard constraints on states looking to raise revenue progressively?

Occasionally claims are made that states are constrained in their ability to raise revenue progressively because high-income households will simply move in response to higher taxes, or that cuts to corporate taxes will pay off so handsomely in terms of faster economic growth that spending should be slashed to accommodate these cuts. These claims are utterly without foundation.

In regard to flight of high-income households, most migration decisions seem to be made for reasons other than taxation (housing prices are a large factor), and while some small increase in out-migration following tax increases is possible, the evidence is clear that

Figure E

## K–12 public education spending is another casualty of austerity

Real expenditure per pupil on K–12 public education by state and local governments, 2000–2015



**Source:** Author's analysis of Bureau of Economic Analysis National Income and Product Accounts (BEA various years) and U.S. Census Bureau public data (various years)

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states get to keep the vast majority of all extra tax revenue that accrues to them following a hike in tax rates. Tannenwald, Shure, and Johnson (2011) provide a comprehensive review of the evidence on the effect of tax changes on migration and conclude that “recent research shows income tax increases cause little or no interstate migration.”

A more recent study, published in the *American Sociological Review (ASR)* by Young et al. (2016), uses state-of-the-art empirical techniques to precisely estimate the causal effect of tax hikes on high-income household migration. Its findings strongly support the Tannenwald, Shure and Johnson (2011) findings. Young et al. (2016) look at state-to-state migration of millionaires over a long period of time (1999 to 2011) and also look at a sharply-focused discontinuity analysis of millionaire populations along state borders that have seen one of the border states significantly raise top tax rates. Neither analysis shows a substantively significant effect on migration of tax rate changes. When Florida is excluded from the analyses, Young et al. find no statistically measurable effect of tax changes on migration at all.

An obvious plausible reason why state tax increases would be only weakly associated with out-migration is that taxes finance quality-of-life improvements that residents value. A state that continually cuts taxes in an effort to attract residents would find its amenities and services declining rapidly, and this would be a countervailing influence to the attraction of lower tax rates for potential migrants.

While there appear to be few economic constraints against raising revenue from

progressive changes in personal income tax rates, academic studies also find very small to negative payoffs to cutting state corporate tax rates. The corporate income tax is a notably progressive tax. Recent years have seen growing calls to cut corporate income tax rates in the name of boosting business investment.

However, in a recent study, Ljungqvist and Smolyansky (2015) conclude: “We find little evidence that corporate tax cuts boost economic activity...”<sup>5</sup> Indeed, the pressure to cut corporate tax rates seems disproportionate to any economic payoff estimated in the economics literature; a paper by Chirinko and Wilson (2010) identifies a key reason why: state-level business tax rates are extraordinarily sensitive to campaign contributions made by corporations.

Importantly, many states provide significant credits against businesses’ tax liabilities, driving a large wedge between the headline statutory business tax rate and the effective rate actually paid. Many of these credits are on fiscal “autopilot”—they are available each year with any review or needed legislation, unlike much discretionary spending. Much research shows that the alleged purpose of many of these business tax credits (spurring economic growth) could be more efficiently met with some other policy tool, as we highlight in the next section. Reducing inefficient business tax credits allows more revenue to be raised from the business sector without raising rates by simply broadening the business tax base.

## Should state fiscal policymakers prioritize low taxes or high investments?

Thompson (2010) directly compares tax-cutting versus investments as state-level economic development tools. He finds:

The available evidence suggests that the most effective options for creating jobs, in the short- and long-term, are investing in infrastructure and building the skills of the current and future workforce. Tax cuts and business subsidies on the other hand, do little to create jobs in the short-run, and are not the most effective approaches to generating growth over the long-term.

Bartik (2006) examines state-level spending on education and its long-run economic payoff. He finds that the benefits of a coordinated across-state strategy of investing in early childhood education are at least 10 times larger than benefits from states cutting taxes to incentivize businesses.

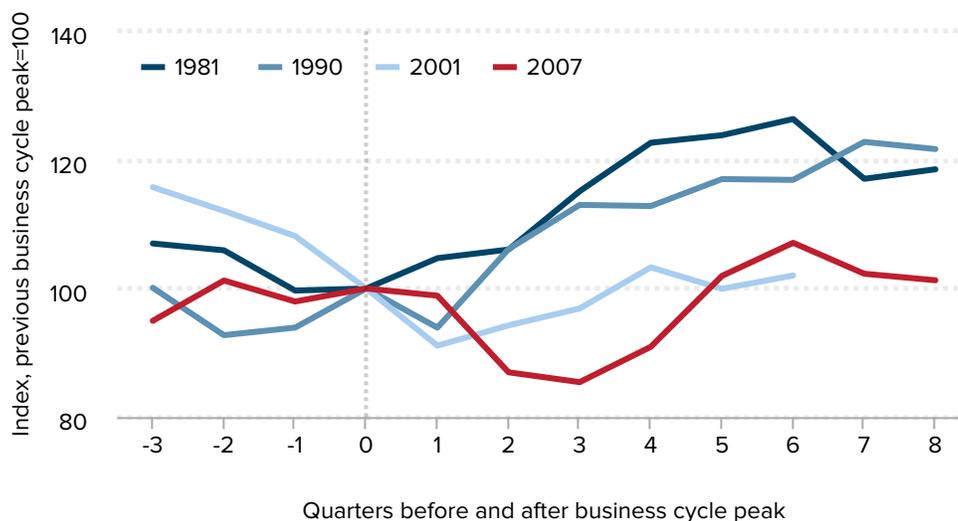
## A look at key indicators from Connecticut

**Summary:** *The lessons from national data apply firmly to Connecticut as well, and Connecticut has ample room to raise revenue to support an investment agenda.*

Figure F

## Connecticut taxes lag recovery

Index of Connecticut state taxes as a share of personal income, last four business cycles



**Source:** Author's analysis of Bureau of Economic Analysis National Income and Product Accounts (BEA various years) and U.S. Census Bureau public data (various years)

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The national evidence is clear: raising taxes is a better strategy for closing state budget shortfalls than cutting spending. Of course, in theory there could be some states that have already maximized their options for raising taxes. An example would be any state that would need to raise its taxes so high to close budget shortfalls that the state would become an outlier in its tax burden and previous research could no longer be applied to its experience.

Connecticut is emphatically not one of those states. For example, in the year 2000, Connecticut state and local government spending as a share of gross state product (GSP) was 7.8 percent, versus an 8.9 percent average across states nationally. By 2015 this share was 8.3 percent in Connecticut versus 9.0 percent nationally. In short, it seems hard to argue that state and local government spending in Connecticut is so lavish that it is danger of pushing the needed state tax rates to levels outside the bounds of taxes in normal American states.<sup>6</sup> Further, as **Figure F** highlights, the ratio of tax revenues to state personal income rebounded far more slowly in Connecticut in the aftermath of the Great Recession than it had from recessions in the early 1980s and 1990s.

## The Connecticut business sector is lightly taxed compared with other states' business sectors

An annual ranking of state and local business taxes by Ernst and Young (2016) finds that Connecticut has one of the lightest business tax regimes in the country. As a share of

gross state product (GSP), Connecticut is tied for the lowest business tax burden in the nation. As a share of total state and local taxes collected from businesses, Connecticut also ranks last. From 2014 to 2015, Connecticut business taxes remained largely unchanged, putting Connecticut in the bottom eight states with the smallest increases in business taxes in that year. In short, relative to other states, Connecticut has an extraordinary amount of room to ask more from businesses to help ease budget pressures.

Before the Great Recession, several New England states increased “tax expenditures” (government spending on tax credits, exemptions, deductions, etc.), usually justified as attempts to incentivize businesses to move to their states. Such measures substantially reduced state revenues before the Great Recession hit, leaving these states with smaller budget reserve funds and less flexibility to respond to the fiscal consequences of the downturn.<sup>7</sup>

Connecticut continues to rely on these type of incentives to encourage businesses to locate, hire, expand, and invest within its borders. In Connecticut, credits against businesses’ tax liabilities have grown from roughly \$5 million in the early 1990s to over \$160 million today. Yet the state itself found that several tax credit, abatement, and exemption programs have had negative or very limited positive impacts, while other programs have had little or no participation from businesses. Some of these programs have been recommended for elimination.

Ongoing assessment of the payoff and future policy for these tax credits is warranted. Research by Bartik (2006), for example, shows that for Connecticut, state payoffs from increased educational spending exceed payoffs from providing business tax incentives, by an order of 15 to 1. The Pew Center for the States (2012) considered the scope of each state’s tax incentive evaluations from 2007 to 2011, assessing whether states evaluated all major tax incentives and sought to ensure that policymaking was informed by the results. Connecticut scored well on its assessment of its tax incentive programs, but scored relatively poorly on testing whether those investments actually work.

Connecticut does not currently ensure that this information is considered when lawmakers decide whether to use tax incentives, how much to spend, and who should get them. The states of Washington and Oregon could serve as models of how to effectively use internal state data to inform policymaking in this area.<sup>8</sup>

When considering cutting corporate tax rates and looking to other states as models, it is also instructive to look at what happened in Kansas: In 2012, Governor Brownback led a successful campaign to cut corporate taxes, citing a growth payoff that would make this a sound economic strategy. These tax cuts, and the spending cuts used to finance them, proved harmful to Kansas’ budget and resulted in *slower* economic growth than that of neighboring states. As a result, the Kansas state legislature just passed a measure to reverse course and rescind most of the 2012 tax cuts.<sup>9</sup> Like households, businesses care about taxes, but they also care about the quality and reliability of public goods and services that are essential for adequate and appropriate labor supply and access to markets.

## Individual tax rates for top earners are lower than those of neighboring states

Moving from business taxes to individual taxes, Connecticut has lower top marginal income tax rates than two of its most important neighbors (New Jersey and New York). As Connecticut Voices for Children (CTVC 2017) has noted, even a half a percentage point increase in the top marginal income tax rate in Connecticut would boost state revenues by more than \$200 million annually. Such an increase would still leave Connecticut's top rates lower than those in New Jersey or New York.

Another measure that could potentially raise revenue in the near term and stabilize revenues over the business cycle over the long term is broadening the base for the state sales tax, including doing a better job collecting sales taxes on Internet purchases. CTVC (2017) have estimated that such sales tax base-broadening could raise revenue by over \$1 billion.

Finally, by far the most effective method for stabilizing state spending over the business cycle in future years is simply being scrupulous in not squandering rainy day funds during relatively good economic times by indulging in tax-cutting. CTCV (2017) have identified a number of reforms meant to allow the state's budget reserve fund to be protected from opportunistic tax-cutting during prosperous times.

## Connecticut has failed to pursue an investment agenda

These measures—increasing tax revenues to boost and stabilize resources available to sustain state investments—are sorely needed. While spending data for Connecticut is slightly more encouraging than national averages on some measures, it remains too low overall. **Figure G** shows the share of GSP spent on state government public investment and K–12 education in 2000, 2007, and 2014 (comparing the latest year available with previous business cycle peaks). The latest years have seen declines in each measure. Some of this decline is driven by rising prices of both public investment goods (particularly the cost of construction materials) and education, but the upshot remains the same: the state's public investment effort—including its K–12 spending—has fallen behind what is needed to ensure that the inflation-adjusted resources of the state flow to these vital goods.

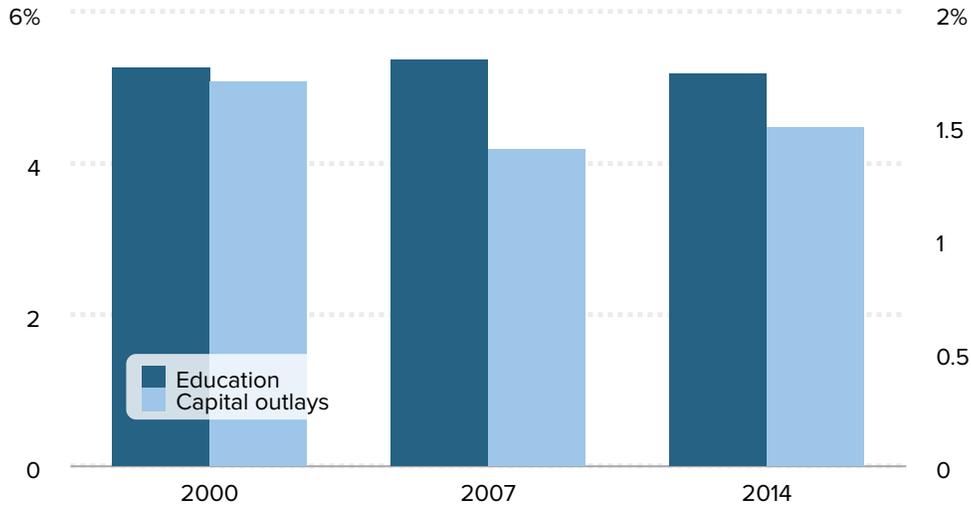
In 2014, the last year for which state data is available, the ratio of capital outlays (or public investment) by state and local governments to state-level GSP in Connecticut was 1.4 percent (see **Figure H**), placing it in the lowest fifth of states. In short, while Connecticut has ample room to raise revenue, it also has ample room to boost its public investments. All in all, Connecticut could benefit substantially from moving to a state budget strategy that emphasizes progressive revenue increases and ramped-up public investments.

The Connecticut record in providing state support for higher education is even worse.

Figure G

## Both human and physical capital investment is lagging in Connecticut

Per pupil spending on public K–12 education and real gross investment as shares of real personal income, 2000, 2007, and 2014



**Source:** Author’s analysis from Bureau of Economic Analysis National Income and Product Accounts and Census Bureau public data

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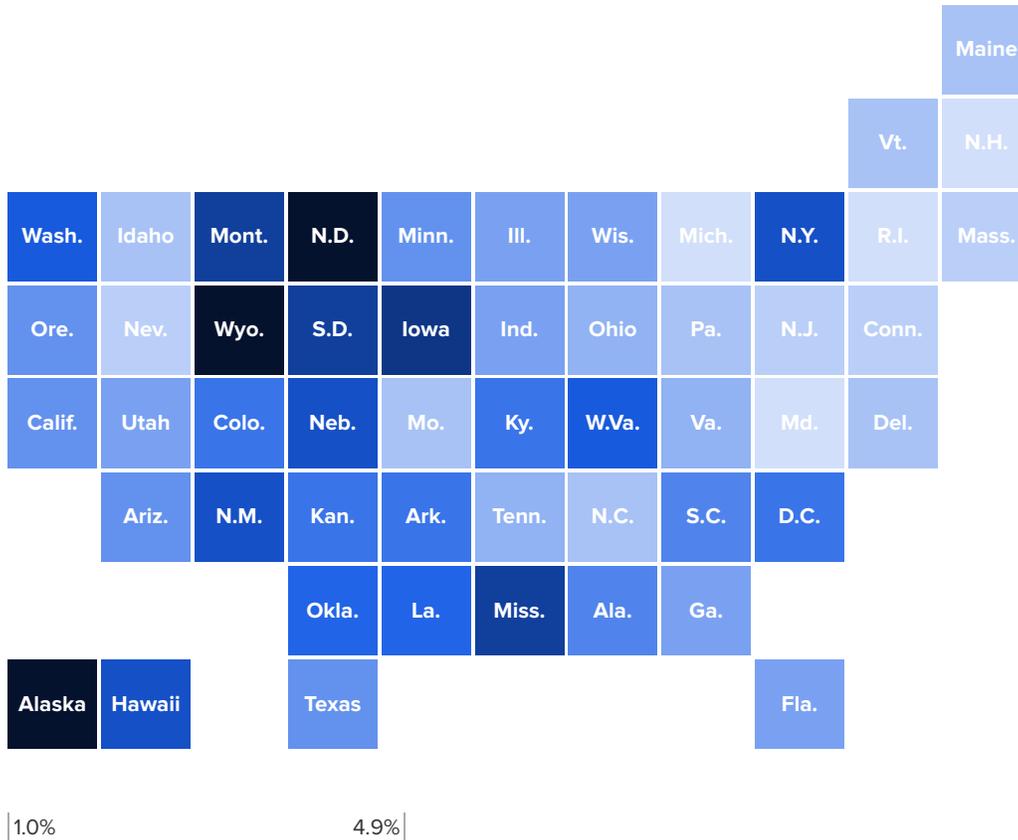
Trostel and Ronca (2009) have constructed a comprehensive measure of state support for higher education that accounts for both state ability-to-pay as well as need. Trostel and Ronca define *need* as the total number of high school graduates in the previous four years and assume that all high school graduates—within classes, among states, and over time—are equal in needing higher education. They then measure state support as total state funding for higher education (all state and local government appropriations) divided by both a state’s average per-resident income and the total number of high school graduates over the previous four years. Using this metric, Connecticut ranks 45th among states.

This failure to undertake an investment agenda for higher education is short-sighted. Public investment in higher education translates into higher productivity growth and higher wages for typical workers (Fisher and Berger 2013). This investment is also fiscally positive in the long-run, resulting in higher tax collections and lower public-safety and income-support spending, which fully offset the cost of providing the education. While most of the fiscal benefits of higher education investments accrue to the federal government, it is still fiscally positive in the long run even from the narrower state perspective (Trostel 2015).

Figure H

## Lagging investment leads to low Connecticut ranking in gross investment

Gross investment as share of gross state product, by state, 2014



Source: Author's analysis of Bureau of Economic Analysis (BEA various years) and U.S. Census Bureau State and Local Finance public data

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## What is a better spending path for Connecticut to follow?

One benchmark for Connecticut public investment would be meeting the “Children’s Budget” target suggested by Thomas (2017) of Connecticut Voices for Children. This target calls for having 40 percent of the statewide budget devoted to resources that directly benefit children. Thomas notes that recent budgets have seen this “children’s share” drop to under 30 percent. Restoring a 40 percent target would require an annual increase of over \$2 billion.

If Connecticut policymakers raised revenue from progressive sources by \$2 billion annually in coming years and used this to boost public investments, this would result in state economic output that is roughly \$2.2 billion larger and would support or create roughly 150,000 full-time equivalent (FTE) jobs over this timespan. The evidence for this is simply that the economic output multipliers for spending increases (see Table 1) average

roughly 1.5 while multipliers for the economic drag of tax increases average roughly 0.4. This means that the net multiplier for a spending increase financed with progressive revenue increases is 1.1. This means that the \$2 billion in spending (financed with progressive revenue sources) would yield an output of \$2.2 billion.

Combining this output gain with data indicating that each full-time equivalent job in the national economy is associated with \$145,000 in output yields the result that jobs would rise by roughly 150,000 due to this increase in investment effort.

## Conclusion

State and local austerity have contributed enormously to the agonizingly slow recovery from the Great Recession. The spending cutbacks that have driven this austerity will also have adverse consequences for long-run productivity growth. While states do have to balance their budgets, there is clear economic evidence that this budget-balancing should lean more on progressive revenue increases and less on spending cuts. A high-investment state economic development agenda will provide payoffs in both near-term job creation as well as in long-run productivity growth and even in long-run benefits to the state fiscal situation. These conclusions apply generally across states, and they apply firmly to the situation in Connecticut as well.

## About the author

**Josh Bivens** joined the Economic Policy Institute in 2002 and is currently the director of research. His primary areas of research include macroeconomics, social insurance, and globalization. He has authored or co-authored three books (including *The State of Working America, 12th Edition*) while working at EPI, edited another, and has written numerous research papers, including for academic journals. He often appears in media outlets to offer economic commentary and has testified several times before the U.S. Congress. He earned his Ph.D. from The New School for Social Research.

The May 11 version of this report makes a correction to the decline in Connecticut's support for higher education. The fiscal 2017 budget saw a \$33.5 million decline, not a \$33.5 billion decline, in higher education spending.

## Endnotes

1. Recent reports that revenues have come in below expectations may well put further downward pressure on spending in subsequent budget proposals.
2. See Bivens (2015) for the definition of a healthy nominal wage target.
3. See Bivens (2016) for trends in government spending in the current recovery relative to earlier ones.

4. Government transfers include Social Security, Medicare, Medicaid, unemployment insurance, food purchasing assistance through the Supplemental Nutrition Assistance Program (SNAP), and subsidies from the Affordable Care Act (ACA), among others. Government consumption and investment includes work done by government employees directly (teachers, police, safety inspectors), as well as work financed by the government for which they receive a good or service (e.g., hiring a private construction firm to build or repair roads and bridges).
5. The full Ljungqvist and Smolyansky (2015) quote is: “We find little evidence that corporate tax cuts boost economic activity, unless implemented during recessions when they lead to significant increases in employment and income.” Importantly, this last caveat about corporate tax cuts boosting employment and income during recessions does *not* claim that corporate tax cuts should be a *preferred* fiscal tool for boosting near-term growth during or after recessions. Ljungqvist and Smolyansky do not compare the recession-fighting stimulus of corporate tax cuts with better-targeted fiscal measures, like public investments or progressively targeted transfers. As noted before, while corporate tax cuts do provide some positive fiscal stimulus when the economy suffers from slack demand, this is dwarfed by the boost given by better-targeted fiscal measures.
6. Author’s analysis of data from the Bureau of Economic Analysis (BEA) state and local gross domestic product (GDP) accounts.
7. See Thompson (2010) for this analysis of tax expenditures.
8. A recent vote by the Connecticut General Assembly’s Finance, Revenue and Bonding Committee has approved a measure that would move the state toward using this information better in future decisions. See the [press release](#) from the State of Connecticut Comptroller’s Office.
9. See Mazerov (2016) for this analysis of Kansas.

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