



# EPI BRIEFING PAPER

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## DIRE STATES State and Local Budget Relief Needed to Prevent Job Losses and Ensure a Robust Recovery

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The shift in the U.S economy from a 0.7% rate of contraction in the second quarter of this year to a 3.5% rate of growth in the third marks the first sign of growth in over a year and the largest growth in two years. The economy continues to shed jobs, but at a slower rate; business investment is still declining, but also at a slower rate. All of these facts are possible indicators that we have entered an economic recovery.

Much of the recent growth in GDP is the result of the American Recovery and Reinvestment Act (ARRA) of 2009. By enacting expansionary fiscal policy—raising spending and cutting taxes—the recovery act pumped money into the economy, boosted demand for goods and services, and kept businesses from enacting more layoffs or going broke. The economy would have 1 million to 1.5 million fewer jobs and about \$219 billion less economic activity had the recovery act not gone into effect.

Still, unemployment is high and job losses continue. More than 8 million jobs have been lost since the beginning of the recession and another 2.8 million are needed just to keep up with population growth.

State and local budget shortfalls will worsen the employment situation at a time when it is clear that we must undertake robust efforts to create jobs. The recession has led to much lower tax revenues for state and local governments (and to a certain extent higher spending), and, unlike the federal government, state and local governments must balance their budgets. So while federal policy makers are enacting expansionary fiscal policy, state and local policy makers are cutting spending and raising taxes, steps that will lead to lower consumer demand and more unemployment. Moreover:

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- State and local governments have already begun adopting contractionary fiscal policies in response to budget gaps, but future shortfalls will be much larger—indeed, they will be enormous. Because these shortfalls tend to grow for two years after the end of a recession, they will continue to drag on the economy at least through 2012.
- Even after accounting for the budget relief provided in the recovery act, state governments are still projected to face \$369 billion in shortfalls in the current fiscal year and the next two years. Local governments are projected to face an additional \$100 billion in shortfalls over that same period.
- These shortfalls will result in hundreds of billions of spending cuts and tax hikes, which will likely result in millions of fewer jobs over the next two and a half years.
- State and local budget cuts not only diminish public services; they also hurt the private sector. For each dollar of budget cuts, over half of the jobs and economic activity lost are likely to be in the private sector.
- To avoid higher unemployment and a heavy economic drag, the federal government should extend the state and local budget relief provided in the recovery act by \$150 billion over the next one-and-a-half years, through state fiscal year 2011.

At this point, Congress has a choice. On the one hand, it can do nothing, thereby forcing states and local governments to cut budgets and raise taxes by hundreds of billions of dollars over the next few years. The result will be a drag on the economy that will at best lead to a long, painful, and relatively jobless recovery and at worst cause enough damage that the economy reverses course and begins to contract again. On the other hand, policy makers can extend additional budget relief to state and local governments. Given the fragility of the economy, already-high unemployment, and the magnitude of the budget shortfalls, it is clear that we cannot afford inaction. Congress should provide significant budget relief to secure a robust, job-based recovery.

## The recovery act so far

The bursting of the housing and stock bubbles caused about \$15 trillion of personal wealth to vanish from the economy in a matter of months. Consumers, already over-leveraged and now much less wealthy, cut their consumption, leading to a drop in overall demand for goods and services and massive layoffs. Unemployment skyrocketed 4.8 percentage points, a far steeper increase than in any previous postwar recession, and 5% of the nation's jobs disappeared.

To combat the steep drop in demand and dangers of a possible deflationary spiral, Congress passed and the president signed the \$787 billion recovery act in February 2009. As of the end of September about \$220 billion had entered the economy, mainly in the form of transfers to individuals (unemployment insurance, food stamps, etc.), tax cuts for businesses and individuals, and state and local budget relief. While the estimate of the impact of the recovery act varies from study to study, most find that it provided a significant boost to the economy in the second and third quarters. A recent EPI paper (Bivens 2009) estimated that the recovery act boosted economic growth by 3.1 percentage points in the second quarter and 2.7 percentage points in the third, and added or saved between 1.1 million and 1.5 million jobs. Both estimates are consistent with other independent forecasts (see Appendix A).

The effectiveness of the recovery act should be judged based on how much worse the economy would be without it. Before the act's passage the economy was on a sharp downward trajectory; GDP contracted at an annual rate of 5.9% between October 2008 and March 2009, the worst decline in over 50 years. Without the recovery act, Bivens (2009) projects that the economy would have contracted by 3.8% in the second quarter of this year rather than 1.0% and grown by just 0.8% in the third quarter instead of 3.5%.

Job losses continue, but the rate of decline has slowed significantly. In the first quarter of this year, the economy lost an average 691,000 jobs per month. In the second quarter, when recovery act spending was fully underway, the average monthly job loss rate dropped by over a third—to 428,000 jobs lost per month. In the third quarter job

losses dropped another 40%—to 256,000 per month. The trend is encouraging, and a measurable sign that the recovery act has significantly boosted employment.

### **State budget relief in the recovery act**

One of the most effective pieces of the recovery act has been the \$144 billion in state budget relief, provided mainly in the form of Medicaid and education funds. These areas were selected for two reasons: first, health care and education are often the first and largest targets for budget cuts; second, federal fund distribution formulas in both areas already existed, allowing Congress to avoid a fight over who got what (although Congress did rely in part on a newly created State Fiscal Stabilization Fund for some education allocations).

For the most part, these pipelines were merely distribution mechanisms to get money to the states for general purposes. Policy makers expected that the funds would replace rather than augment a portion of state health and education funds, thereby freeing up those state revenues to fill the general fund budget gap. Congress did include “maintenance of effort” provisions, which restricted the extent to which states could reduce overall funding for Medicaid and education programs. For Medicaid, states could not change the “eligibility standards, methodologies, and procedures” that were in effect July 1, 2008 (Department of Health and Human Services 2009). For education, states must maintain their respective funding at

FY06 levels or greater (Department of Education 2009). The purposes of these strictures was to prevent states from cutting their budgets anyway and using the savings to cut taxes at the expense of federal taxpayers.

So far, \$52.2 billion of the \$144 billion in budget relief has been distributed to states and local governments, and this spending has been among the most effective and fastest-acting provisions in the recovery act.<sup>1</sup> Bivens estimates that state budget relief boosted the economy by \$73 billion through the end of October and is responsible for an additional 360,000 to 500,000 jobs that would otherwise not exist (Bivens 2009). According to a recent report by Mark Zandi, chief economist at Moody’s Economy.com, each dollar of budget relief has provided nearly twice the economic stimulus as temporary tax cuts (Zandi 2009).

### **The unique danger of budget cuts**

The success of the spending increases and tax cuts in the recovery act makes clear that the opposite approach—cutting spending and raising taxes—would be disastrous during a downturn. Between budget cuts and tax increases, the former pose a more immediate threat to the economy (see box below), and so the following section focuses on three aspects of budget cuts: (1) they cause a drop in vital public services, (2) they mostly impact the private sector, and (3) the avoidance of budget cuts, and thus layoffs, is a more efficient job creation policy than attempting job creation through traditional stimulus measures.

## **BUDGET CUTS AND TAX INCREASES: NOT TWO SIDES OF THE SAME COIN**

Between budget cuts and tax increases, budget cuts pose a more immediate threat to the economy because the contractionary effect of tax cuts can be mitigated — by targeting them to high earners. Low-income individuals spend most or all of what they make, so reducing their disposable income through tax increases or cuts in services will have a large and direct impact on consumer demand. High earners, on the other hand, have a higher propensity to save, meaning that they are more able than low earners to pay the taxes by cutting their savings rather than by reducing their purchases (Economic Analysis and Research Network 2009).

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## ***Budget cuts diminish vital public services***

“Cutting the budget” has, ironically enough, a somewhat positive connotation in American politics, suggesting that policy makers are “trimming the fat” and simply making government more efficient. But that outcome is nearly always fictitious—in reality, budget cuts force the layoffs of public servants like teachers, police officers, and firefighters who provide important public services that we need as much now as we did before the recession (if not more). In all likelihood, future policy makers will hire them back once fiscal situations improve, and so preventing the layoffs means avoiding both the economic costs of the job loss and the transactions costs of rehiring. It makes no economic sense to lay off public servants if we know we are just going to hire them back in a few years.

Cuts in other public services also harm the economy. For example, states have slashed funding to public transit agencies, forcing them to cut service hours, eliminate routes, and raise fares. These measures disproportionately impact low-income households that rely on public transit to get to work, pick up their children from school, go to the grocery store, and visit other family members. From the individual perspective this is doubly cruel—low-income households have suffered the most from the current recession, and not only are there fewer jobs available now, but the transit cuts have decreased their mobility, limiting the geographic area in which they can look for jobs. From the business side, transit cuts are counterproductive because they limit the available pool of labor and thereby increase production costs.

## ***Budget cuts hurt the private sector***

For each dollar of budget cuts, over half of the jobs and economic activity lost will be in the private sector, for a number of reasons: (1) a quarter of state spending is transfer payments, which predominantly serve to increase beneficiaries’ purchasing power for private spending; (2) state spending is often in the form of grants or contracts to private or nonprofit entities who are then responsible for the provision of public services, (3) nearly a third of direct state spending (i.e., public provision of goods and services) supports jobs in private supplier industries; and (4) workers who lose their jobs have less money to spend

than they otherwise would, and their spending supports jobs across the economy.

A good example of state transfer payments to individuals is Medicaid benefits, which are generally delivered by private-sector providers rather than by state-owned clinics. Besides increasing the demand for private-sector medical services, Medicaid also increases the disposable income of households receiving the benefits: because many of their health care expenditures are provided by the states, beneficiaries have more money left over to spend in the private economy. For example, when Medicaid beneficiaries have extra money to buy back-to-school clothes for their children, demand is created for retail workers. When these retail workers go to lunch, jobs are created for wait-staff and cashiers. These effects that ripple out from the initial spending are an important part of why some policies are good economic stimulus and some are not. The ripples from state transfers like Medicaid are large.

The most common example of the private provision of a public service is transportation infrastructure. States rarely do construction work themselves; they instead rely on private contractors who hire workers in the private sector. That firm might then hire a subcontractor, who then might hire a subcontractor of their own... at each stage, state money flows down the contracting ladder to workers who might not even be aware of how dependent on state funds their jobs really are.

Even money that is targeted directly for goods and services provided by state employees creates large ripple effects in the private sector. Cutting money for teachers, firefighters, and transit operations hurts more than public sector employees—it also cuts money for the supplies and capital equipment necessary to undertake these activities (firetrucks, books, rail-cars, etc.).<sup>2</sup> These supplies and capital equipment are almost always provided by private vendors. So, even the budget relief that goes directly toward preventing public sector layoffs still benefits private-sector vendors.

Supplier industries are also affected by transfer payments and the private provision of public services. To continue the above examples, demand for health care services includes a need for more medical supplies like

TABLE 1

## Jobs lost per \$1 million in cuts of direct government spending

	State and local	Private	Total	Percent private
<b>Local</b>				
<i>Enterprises except transit service</i>	33.9	3.6	37.6	9.5%
<i>Hospitals</i>	7.4	5.7	13.2	43.3%
<i>Educational services</i>	15.0	2.3	17.3	13.3
<i>Other</i>	2.8	3.6	6.4	55.5
<b>State</b>				
<i>Enterprises</i>	33.9	3.6	37.6	9.5%
<i>Hospitals</i>	5.9	5.8	11.7	49.1
<i>Educational services</i>	11.7	3.8	15.6	24.4
<i>Other</i>	3.6	2.2	5.9	37.7%
<b>Averages</b>	14.3	3.8	18.2	30.3%

SOURCE: Bureau of Labor Statistics (BLS) employment requirements matrices.

X-ray machines, tongue depressors, etc., while infrastructure jobs will require steel, cement, and other construction materials.

The Bureau of Labor Statistics (BLS) tracks how each million dollars spent in a given sector translates into jobs supported in supplier industries in each other sector of the economy. For example, a million dollars worth of final demand in the automobile production sector requires jobs in glass, steel, and rubber industries, as well as the services of accountants and lawyers. Using these data, one can calculate how many private jobs in supplier industries would be eliminated by a million dollars of spending cuts by state and local governments in selected activities. **Table 1** shows that, in the eight direct spending activities of state and local governments that are tracked in the BLS employment requirements data, almost 30% of spending in the state and local sector goes to support jobs in private supplier industries.<sup>3</sup>

Lastly, besides the private-sector jobs created in supplier industries, the re-spending “ripples” that were described earlier are large. When teachers are hired (or retain their jobs because of federal budget relief), they might buy clothes, eat out at restaurants, or even decide to buy a new car. Each of these activities increases demand

in the private sector for employees in the retail, restaurant, or automobile sectors. These re-spending effects of state budget relief are large—economist Mark Zandi (2009) has estimated that roughly 41 cents is generated through re-spending effects for every dollar allocated in the form of state budget relief.

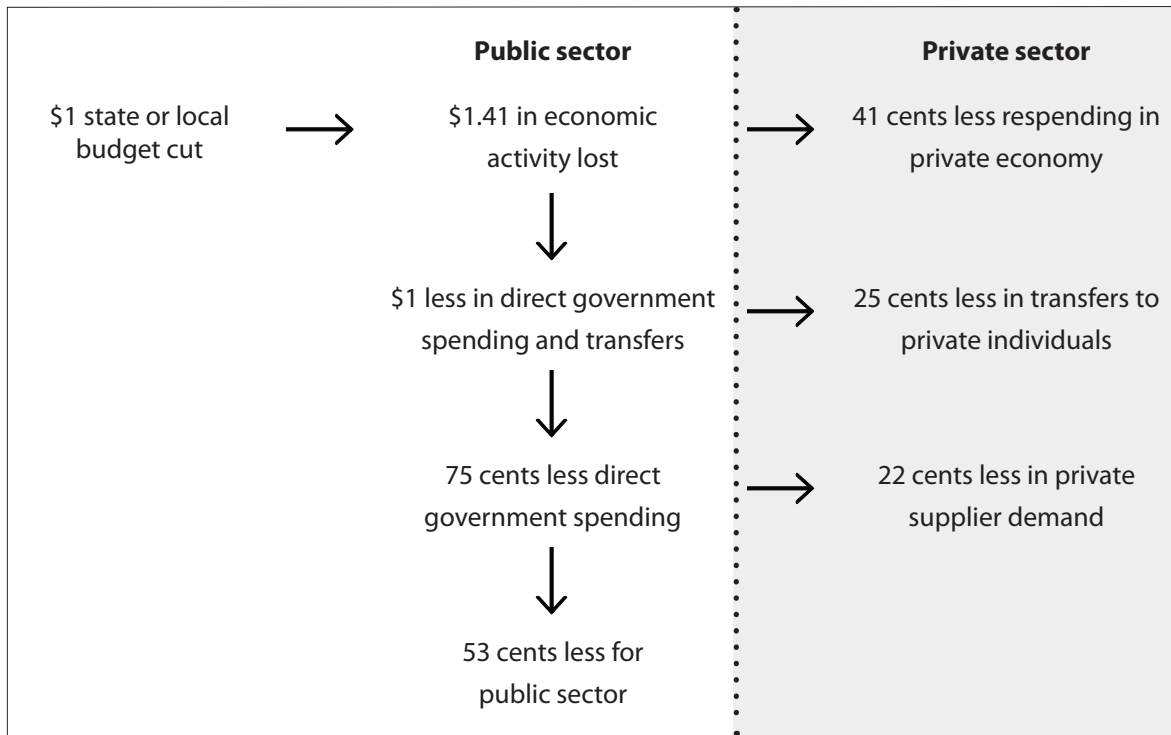
Flipping this around, **Figure A** shows the economic effect of \$1 in across-the-board budget cuts. Each dollar in cuts has a ripple effect that results in \$1.41 of lost economic activity. Forty-one cents of that loss is spending taken right out of the private economy, while \$1 is the reduction in direct government spending (i.e., education) and transfers (i.e., Medicaid). Twenty-five cents of that dollar is reductions in transfers to private individuals, while 75 cents is reductions in direct government spending. But 30% of that 75 cents—or 22 cents—is in reduced demand for supplier industries, leaving only 53 cents in actual loss to the public sector. Taken together, a full 88 cents—or 62% of the total economic impact of a dollar in budget cuts—falls on the private sector.

### **The costs and damage of layoffs**

Preventing job losses is much cheaper than ignoring layoffs and trying to create jobs out of whole cloth. One rea-

FIGURE A

Ripple effect of \$1 in state and local budget cuts



SOURCE: Author's analysis.

son is that layoffs are extremely painful to the economy; not only do workers lose their income (and thus their spending power), but the layoffs create a sense of uncertainty that leads other still-employed workers to spend less as well. This effect can ripple through the overall economy as consumer confidence drops and panic sets in, causing consumers to cut their expenses as much as possible.

Job loss prevention is also preferable because creating jobs involves substantial transactions costs. As recovery act funds create additional demand, firms must first decide how many of which types of workers to hire to meet that added demand. Firms must then post job announcements, interview potential employees, make the hire, then train the new worker. New employees also tend to have lower productivity, often requiring months of on-the-job experience before they can perform at normal levels.

Not only is it usually cheaper to keep people in the jobs they have rather than hire new ones, it's also faster.

The transactions costs of hiring new workers add time between the recovery act's implementation and its employment effects. Furthermore, there is generally lag time between the moment economic stimulus is enacted and when the funds become available. The money must first filter to the federal agencies, many of which are already understaffed and which must now handle the distribution of funds that are often many times their annual budgets. If the funds are for a new program, the agency must also design and propagate rules for the bidding and usage of the funds (Congress often leaves the implementation details up to the executive branch). State and local budget relief, by contrast, either uses preexisting formulas (like Medicaid) or sets up new formulas (like the state fiscal stabilization fund) that are relatively easy to administer. Because states can easily project the amount of budget relief they will receive, the economic impact often occurs before the money has actually been distributed.



## A ticking time bomb

As the last section illustrates, budget shortfalls—and the fiscal policies used to close those shortfalls—are extremely damaging to the economy. Unfortunately, evidence suggests that we face hundreds of billions in shortfalls in the next few years, shortfalls large enough to severely damage the economy and cause massive job losses.

### Past shortfalls

A look at how states resolved their past budget shortfalls provides a sign of what is to come (Table 2)<sup>4</sup>. In state fiscal year 2009 (July 2008 to June 2009), the \$110 billion total state budget gap (Lav, Johnson, and McNichol 2009) was

closed with \$31 billion in recovery act budget relief and \$26 billion in rainy day funds (Husch 2009), leaving \$53 billion of spending cuts and tax increases. Cuts were most common, with 36 states implementing targeted cuts and 23 states implementing across-the-board cuts, resulting in layoffs (16 states), furloughs (17 states), early retirement (six states), salary reductions (seven states), cuts to state employee benefits (seven states), and reduction in local aid from states (18 states). These cuts all either directly or indirectly depress demand. Because the recovery act only began distributing budget relief in March—nine months into the fiscal year—the initial amount of budget cuts and tax increases that hit the economy in the fall of 2008 was even larger.

## BUDGET GIMMICKS AND ONE-TIME FIXES

Most state actions to close budget shortfalls fall into the category of spending reduction (layoffs, furloughs, early retirement) or tax increases (either temporary or permanent). But states also rely on short-term budget fixes that merely delay the problem. For example, states can move their final payday of the fiscal year from June 30 to July 1 (the beginning of the next fiscal year), shrinking the current year shortfall but exacerbating the problem in the next fiscal year. They might also tap non-rainy day funds such as highway funds, lottery funds, or education funds with positive balances, but these earmarked funds are limited and must be paid back from future general funds. A few states have even started selling off state property—Arizona famously decided to sell its state capitol building (Benson 2009). Because these “solutions” just shift the shortfall into the future, the multi-year budget shortfalls are not affected and are often made worse.

TABLE 2

### State/local fiscal conditions (\$billions)

	2009	2010	2011	2012	Total 2010-12
<i>State budget shortfalls</i>	\$110	\$178	\$180	\$120	\$478
<i>Local budget shortfalls</i>	20	40	40	20	100
<i>Rainy day withdrawals</i>	-26	-1	0	0	-1
<i>Recovery act budget relief</i>	-31	-68	-38	-2	-108
<b>Total fiscal policy contraction</b>	<b>73</b>	<b>149</b>	<b>182</b>	<b>138</b>	<b>469</b>

SOURCE: Center on Budget and Policy Priorities (state shortfall and budget relief), National Association of State Budget Officers (rainy day funds), and author's analysis and National League of Cities (local shortfalls).

At the beginning of state fiscal year 2010 (which began July 2009) state governments faced a collective \$156 billion budget shortfall, which was partially closed with \$68 billion in recovery act funds and just under \$1 billion in rainy day funds. This left about \$87 billion in spending cuts and tax increases, about two-thirds more than the previous year's shortfall. (This increase is due to a roughly one-year lag between economic conditions and state budget conditions, meaning that despite having been in a recession for over a year and a half, the economic pain inflicted by state budget gaps has only begun to be felt. Thus, 2010 is the first year where the recession has had a full impact on state budgets.) The response was targeted cuts (30 states), across-the-board cuts (16 states), layoffs (17 states), furloughs (15 states), early retirement (four states), salary reductions (10 states), and cuts in local aid from states (20 states). The Center on Budget and Policy Priorities estimates that worsening economic conditions from the prior year will lead to another \$22 billion in mid-year shortfalls in 31 states (Lav, Johnson, and McNichol 2009). Overall, states will have implemented about \$109 billion in budget cuts and tax increases over the course of this state fiscal year.

### **Future state shortfalls**

It is clear now that the budget relief provided by the recovery act fell far short of the need. While state and local spending actually rose in the second quarter, it fell again in the third quarter as the budget gaps overwhelmed the state budget relief. At the time the recovery act was being written, projected state budget gaps from state fiscal years 2009-11 totaled \$350 billion, meaning that the \$144 billion provided by the recovery act would fill 41% of the fiscal gap (Broaddus, Lav, Levitis, and Park 2009). The further deterioration in state fiscal prospects since then leaves the recovery funds covering just 31% of the shortfall.

The next two state fiscal years look equally bleak. State budget relief from the recovery act drops to \$38 billion in state fiscal year 2011, as federal Medicaid funds expire and education funds start running out. Meanwhile, the projected overall shortfall is projected to reach \$180 billion, likely the largest single-year 50-state shortfall in history. The fiscal situation starts to improve by state fiscal

year 2012, when the shortfall is projected to reach \$120 billion, though only \$2 billion in state fiscal relief will be available. Between these two years, states will implement another \$260 billion in spending cuts and tax increases (\$142 billion in 2011 and \$118 billion in 2012).

State governments will have about \$25 billion in rainy day funds, but little of it will be available to cover shortfalls. States and local governments keep a running balance in their rainy day funds and rarely fully draw them down. Maintaining a balance keeps interest rates low on their bonds and hedges against expenditures for natural disasters or other unforeseeable emergencies. Also, legal restrictions often apply to how much states can actually use for operating expenses, making it much more difficult for states to use rainy day funds counter-cyclically. While it is difficult to determine how much is available going forward, the fact that in 2010 the states withdrew only \$1 billion in the midst of the worst fiscal crisis in decades suggests that the available balance for the operating budget has already run out or is close to doing so.

Overall, between the current year and the next two years state government shortfalls will hit the economy with \$369 billion in budget cuts and tax increases. That's nearly half of the \$787 recovery act, and that's just the state shortfalls.

### **Local shortfalls**

As states face continued budget gaps, one of the solutions they will increasingly rely on is reductions in local aid. There are few reliable estimates of current-year local budget shortfalls and essentially no estimates of projected shortfalls. This will make the problem look like it went away, but in reality it is merely flying below the radar of available data. For this reason, and because there are signs that local budget shortfalls could be extremely large even without the reduction in state budget relief, it is imperative that policy makers take into account the local fiscal situation. This section will attempt to make rough estimates of the size of local budget shortfalls.

Based on a survey of local budget officials, the National League of Cities estimated that the aggregate fiscal gap that local governments faced in fiscal year 2009, which ended this past June, was 2.9% of their general



## WHAT DO WE MEAN BY LOCAL GOVERNMENTS?

While state governments are easily defined, local governments are not. Local governments include not only cities, but counties, townships, and school districts. Also included are “special districts,” which vary across the country but include sewer districts, fire districts, water districts, and even mosquito abatement districts. Data on local government revenues and expenditures are collected by the Census Bureau every five years, with 2007 offering the most recent survey.

funds, or just over \$20 billion (about twice the previous year’s shortfall) (Hoene and Pagano, 2009).<sup>5</sup> While that is a significant shortfall in its own right, it is likely to be the tip of the iceberg, with evidence suggesting that cumulative shortfalls over the next few years will be massive.

Why has it taken so long for local budget shortfalls to develop? Looking at past recessions, it is clear that—as with states—a significant lag exists between economic conditions and local fiscal conditions. To understand this, one needs to first examine the sources of local revenue.

Local governments primarily derive revenue from three sources: aid from states (40%), sales taxes (8%), and property taxes (34%) (Bureau of Economic Analysis 2009). Local aid from states is cut only after states themselves feel budget crunches, which themselves lag behind economic conditions. Sales tax revenues fall only after consumer spending falls, which happens after disposable incomes are cut either by layoffs, wage cuts, or higher state taxes (implemented to close states’ own budget shortfalls). But the local fiscal lag is mainly explained by how and when property taxes are affected by changing economic conditions.

Recessions are characterized by a drop in demand, and some of the heaviest hit goods are large durables like residential property. Property tax revenues fall because the tax rates are levied on assessed values, which are largely determined by the property’s fair market value.<sup>6</sup> But few states reassess property values each year, meaning that a large-scale devaluation does not immediately have an effect. Historical data show that it takes on average

between one-and-a-half and three years after the end of a recession before local budgets feel the full impact on property tax revenues (Hoene and Pagano 2009).

The 1990-91 recession provides a good example. By the first quarter of 1991, as the recession was ending, property values had dropped about 3% from their peak. But property tax revenues didn’t hit a trough until 1993, over two years after the recession had ended (**Figure B**). A similar pattern is evident in the 2001 recession. Though a housing bubble kept property values—and thus property tax revenues—rising throughout the downturn, by 2003 the tax revenue growth rate had shrunk to 1.5%, down from 6.1% in 2002.

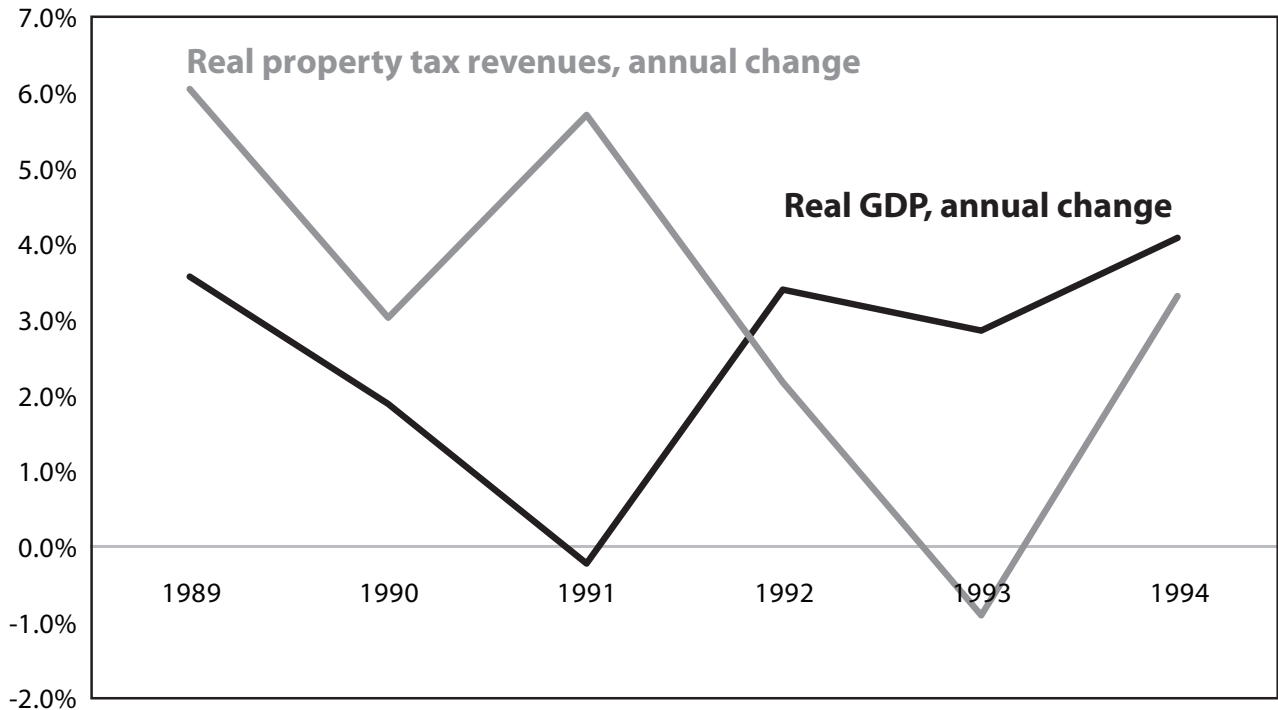
This history bodes poorly for future local budget conditions. This recession is unique in that it was coupled with a bursting of the real estate bubble, which caused an unprecedented 30% drop in property values. So far it has not translated into problems for local budgets; since peaking in 2007 property tax revenues have fallen by only 1.6% through 2008 (**Figure C**). Although 2009 data are not yet available, the emergence of a mere 2.9% gap in FY09 and the historical 1.5-3-year lag after the recession has ended suggest that local governments will not feel the full brunt of the recession until at least next summer.

Assuming that the 2010 shortfall follows the trajectory from last year (in which it was twice the prior year shortfall), and that a fiscal trough occurs next summer, we would expect to see the next two years produce local shortfalls of \$40 billion each (with the summer trough falling in-between the two fiscal years), and then back down to \$20 billion (assuming the trend follows the same

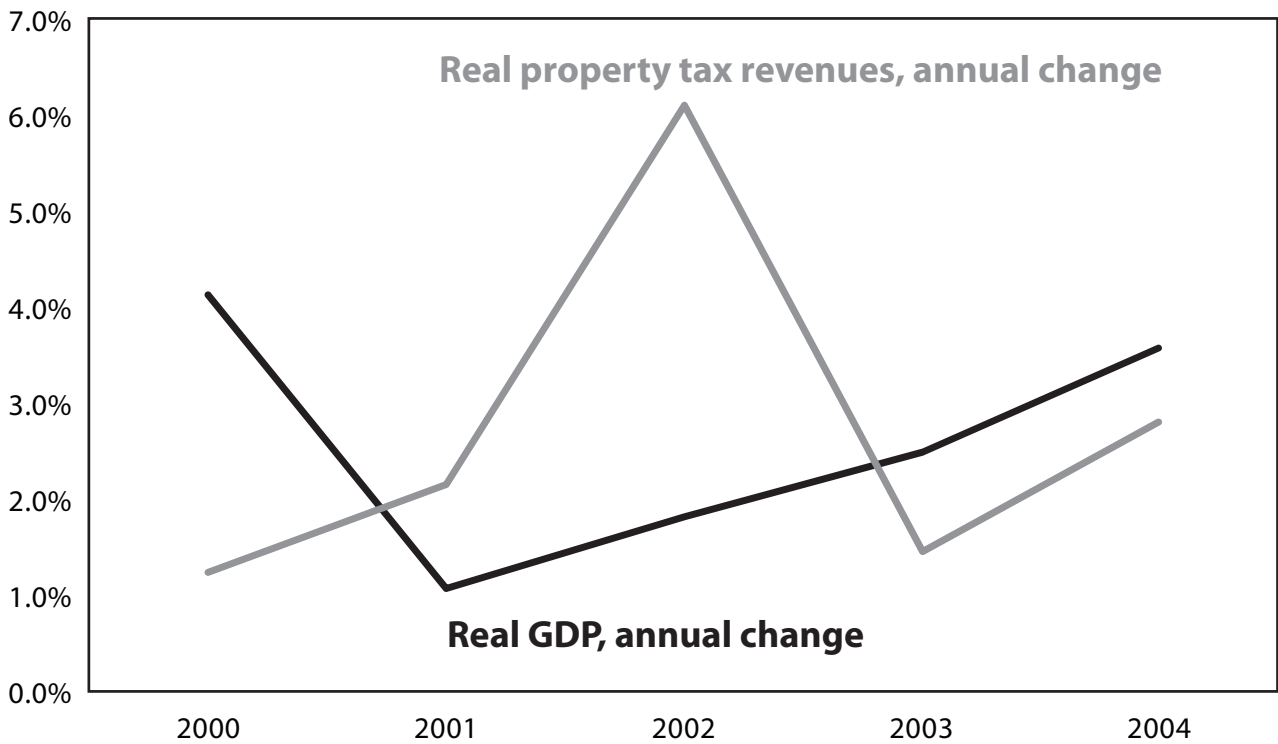
**FIGURE B**

**Delayed impact of declining GDP on property taxes**

**1990-91 recession**



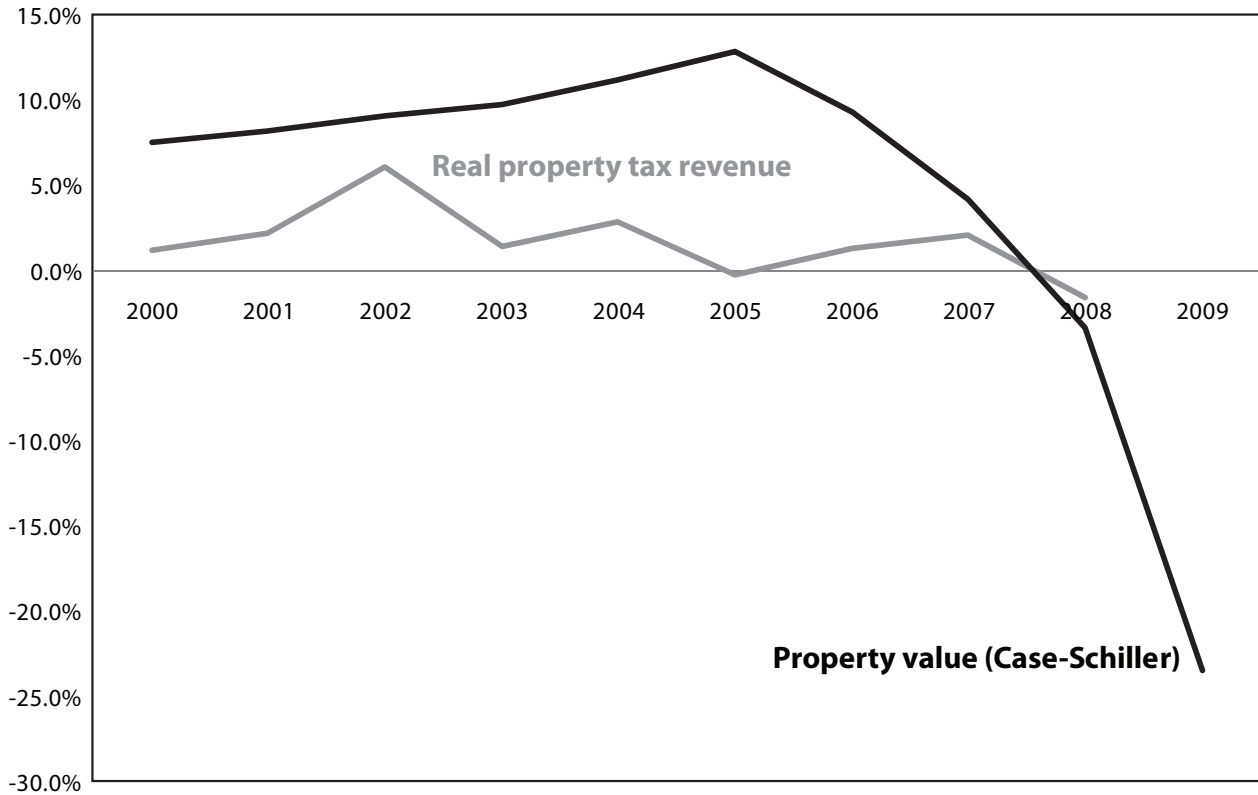
**2001 recession**



SOURCE: Bureau of Economic Analysis.

FIGURE C

Property values and tax revenue, percent change from prior year



SOURCE: Bureau of Economic Analysis, Case-Schiller Home Price Index.

trajectory on the way down as it did on the way up). Thus, a conservative estimate of projected local budget shortfalls through 2012 would seem to be about \$100 billion (Figure D).

### Future contractionary fiscal policy

From this year through the next two years, states will be forced to pass \$369 billion in budget cuts and tax increases, and local governments will follow with another \$100 billion. That adds up to \$469 billion in budget cuts and tax hikes, about two-thirds the size of the total expansionary fiscal policy in the recovery act.<sup>7</sup> The employment impact of such a contraction, based on Bivens economic model (Bivens 2009)<sup>8</sup> would be a loss of over 3 million jobs.

The situation is equally bad for economic growth. The recovery act's greatest contribution to economic growth occurs while its fiscal impact is growing. But now that its contributions to demand have peaked, most of

the recovery act will work to maintain existing levels of economic activity rather than add additional activity. Thus, as these thousands of state and local budget cuts and tax increases accumulate, they will have an immediate negative impact on the economy.

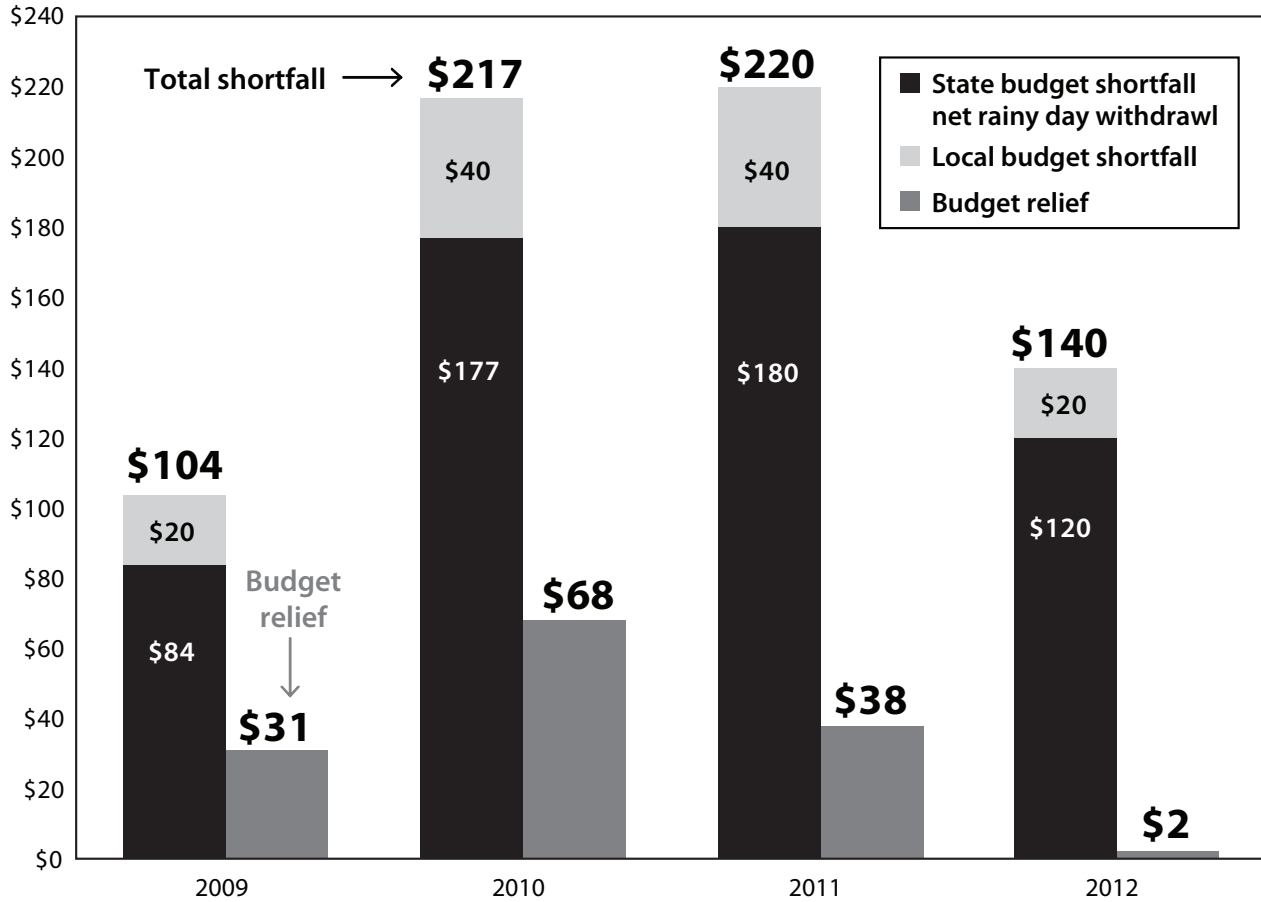
### Policy recommendations

Widening state and local budget shortfalls present a ticking time bomb for the economy. If they are not addressed, state and local governments will be forced to accelerate layoffs, reduce pay, reduce services, and raise taxes and fees. These moves create a drag on the economy, weaken the recovery, and result in the loss of millions of public and private-sector jobs.

To prevent or reduce job losses induced by cutbacks at the state and local level and to ensure a robust recovery, Congress must both extend the state and local budget relief offered in the recovery act through state fiscal year

FIGURE D

State/local budget shortfalls and recovery act relief (\$billions)



SOURCE: Center on Budget and Policy Priorities (state shortfall and budget relief), National Association of State Budget Officers (rainy day funds), and author's analysis and National League of Cities (local shortfalls).

2011 and raise the funding levels. This should be viewed not as a new recovery act, but rather as an extension of the first one, necessary because the budget relief originally provided is inadequate to address shortfalls that continue to grow even after the recovery has begun.

Between the mid-year shortfalls in 2010 and the full shortfalls in 2011, state and local governments will raise taxes and cut spending by \$204 billion.<sup>9</sup> Not all of that

can be mitigated—no distribution formula perfectly targets needy state and local governments, meaning that if the full amount was provided some recipients would get too much and others would still face shortfalls. While finding an exact number needed is difficult, at least \$150 billion in budget relief should be provided. Without it, between 1.1 and 1.4 million jobs will be lost. Congress must act before it's too late.

## Appendix A

Bivens' estimate that the recovery act boosted economic growth by 3.1 percentage points in the second quarter and 2.7 percentage points in the third quarter—and is responsible for saving or creating between 1.1 and 1.5 million jobs—is consistent with other prominent economic models. Christina Romer, chairwoman of the Council of Economic Advisors, estimated that the recovery act contributed 2.3 percentage points and 2.7 percentage points in the second and third quarters, respectively;

Goldman Sachs estimated 2.2 and 3.3 percentage points in the second and third quarters; and Mark Zandi, chief economist at Moody's Economy.com, estimated 2.8 and 3.6 percentage points (see **Table A1**).

Bivens estimates that the recovery act boosted employment by between 1.1 million and 1.5 million jobs, which is also consistent with other forecasters, such as Romer (+1,050,000 jobs), Mark Zandi (+1,073,000 jobs) and the Congressional Budget Office (+1,066,500 jobs).

**TABLE A 1**

### Projections and independent estimates

	Contribution to GDP, percentage points	
	2Q	3Q
<i>Bivens (EPI)</i>	3.1	2.7
<i>Romer (CEA)</i>	2.3	2.7
<i>Goldman Sachs</i>	2.2	3.3
<i>Mark Zandi (Moody's)</i>	2.8	3.6

**SOURCE:** Romer 2009, Goldman Sachs 2009, Zandi 2009.

## Endnotes

1. The \$52.2 billion includes \$8.6 billion in the first quarter, \$22.6 billion in the second, and \$21 billion in the third.
2. The necessity of purchasing capital and supplies that newly hired or retained employees need for their jobs is a key reason why some estimates of how much recovery spending is needed to create or save a single job strikes some people as large. In their initial report on ARRA, for example, Romer and Bernstein (2009) estimated that the recovery act would spend \$92,000 for each job created or saved. Given that most workers do not earn \$92,000 in a single year, this might seem like a lot. However, given total GDP of roughly \$14.2 trillion and a total workforce of roughly 135 million, the average number of dollars of GDP necessary to support a single job in the U.S. economy is closer to \$105,000.
3. Though these data do not include every industry into which state and local governments spend money (only those tracked by BLS), and though these industries are not weighted by spending, an average of these industries provides a useful rough estimate.
4. In this section, budget shortfall and recovery act budget relief projections come from the Center on Budget and Policy Priorities (Lav, Johnson, and McNichol 2009), while the rainy day projections come from the National Association of State Budget Officers (Husch 2009).
5. Census data (Census Bureau 2007) show that aggregate local budgets are about \$1.5 trillion. The general rule of thumb is that local operating budgets consume half the total budget, or in this case about \$750 billion.
6. Some states like California and Massachusetts put caps on assessment growth, making their property tax revenues less sensitive to changes in overall property valuations. But this also makes them more reliant on new housing, which is still assessed at fair market price. Given that drops in new housing construction have been as acute as drops in property values on existing housing stock, and that to a certain extent the latter is helping drive the former, it is unlikely that these states' budgets will be any less affected by property devaluations.
7. This total excludes the alternative-minimum-tax patch, which was not a policy change but rather a continuation of current tax policy.
8. The economic model estimates job impacts by applying economic multipliers (Mark Zandi 2009) to their corresponding stimulus provision, which is then used to measure impacts on economic activity. Using Okun's Law that an additional 2% of economic activity corresponds to a 1% drop in unemployment allows a calculation of the job impact.
9. This includes the \$22 billion mid-year 2010 shortfalls and the full \$182 billion shortfalls that will not be mitigated by recovery act budget relief.

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