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ROCKEFELLER INSTITUTE OF GOVERNMENT**

*Independent Research on America's State and Local Governments*

**Fiscal Features**

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**What Will Happen to State Budgets  
When the Money Runs Out?**

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**Highlights**

- ❖ The federal stimulus package will provide fiscal relief to state governments exceeding \$150 billion over the 2008-09, 2009-10, and 2010-11 state fiscal years.
- ❖ Although the aid is massive, it is temporary. In the best of worlds, as the stimulus aid wanes, the economic recovery will take hold and state tax revenue will rise sharply, as it has after past recessions.
- ❖ But even under optimistic assumptions, the revenue recovery will not be sharp enough or soon enough to avoid the need for significant budget cuts or tax increases. If the tax revenue falloff and recovery are much like that of the 1990 fiscal crisis, as the stimulus aid goes away in 2011-12, states could face a fiscal gap of 4 percent of general expenditures, roughly comparable to annual gaps of \$70 billion.
- ❖ Under alternative assumptions that lead to pre-stimulus budget gaps of nearly \$370 billion over the next 2.5 years — not a worst-case scenario — states could face a 2011-12 fiscal gap of more than 6 percent of state general expenditures, or more than \$100 billion. Under any likely scenario, states will face significant budget problems when the new federal aid runs out.
- ❖ States should use the breathing room provided by the stimulus package to mute and spread out baseline spending cuts and/or tax increases they will need to make, to restructure programs, and to allow for orderly decisionmaking. But they cannot count on it to substitute for these difficult decisions.

## Introduction

State governments face budget gaps that will exceed \$100 billion in the 2009-10 fiscal year and by some estimates could exceed \$350 billion over the 2.5-year period through the end of the 2010-11 state fiscal year.<sup>1</sup>

Fortunately for states, the federal stimulus package (the “American Recovery and Reinvestment Act of 2009”) contains significant aid for states, including \$87 billion for a temporary increase in the federal share of Medicaid costs; \$54 billion in a State Fiscal Stabilization Fund to help stave off cuts states might otherwise make to public education and other programs; a myriad of smaller funding streams that will benefit state needy populations and/or state finances; plus grants for transportation, clean water, and other construction projects.<sup>2</sup>

Unfortunately for states, most if not all of this aid will be temporary. Will it tide states over until the recovery comes? How significantly will it curtail the need for states to cut spending or raise taxes? What will happen when the money runs out?

To investigate these questions, we examined the impact of the fiscal stimulus package on state government finances under two scenarios: (1) a “low-gap” scenario under which the current fiscal crisis is a bit less severe than the sharp 2001 fiscal crisis, but lasts longer,<sup>3</sup> and (2) a “high-gap” scenario under which fiscal gaps approach \$370 billion over the next 2.5 years.<sup>4</sup> We assume that states are able to use most of the federal stimulus package for budget relief rather than for new spending programs.

### Tax Revenue Will Decline for Two or More Years Before Recovery

Figure 1 compares state government tax revenue under these scenarios to tax revenue in the three most recent recessions, adjusted for inflation, population growth, and legislative changes to make the numbers as comparable as possible.<sup>5</sup> Tax revenue as adjusted is indexed to equal 100 at the approximate start of a fiscal crisis (Year 0 on the graph).<sup>6</sup> The graph then tracks the progress of tax revenue for five years after each recession. For example, two years after the start of the 2001 fiscal crisis, adjusted tax revenue had fallen to 91.0 (9 percent below its 2001 value) whereas two years after the start of the 1981 crisis revenue it had fallen to 96.8 (3.2 percent below the 1981 value). The tax revenue falloff in the 2001 fiscal crisis was far sharper than in the two earlier recessions.<sup>7</sup>

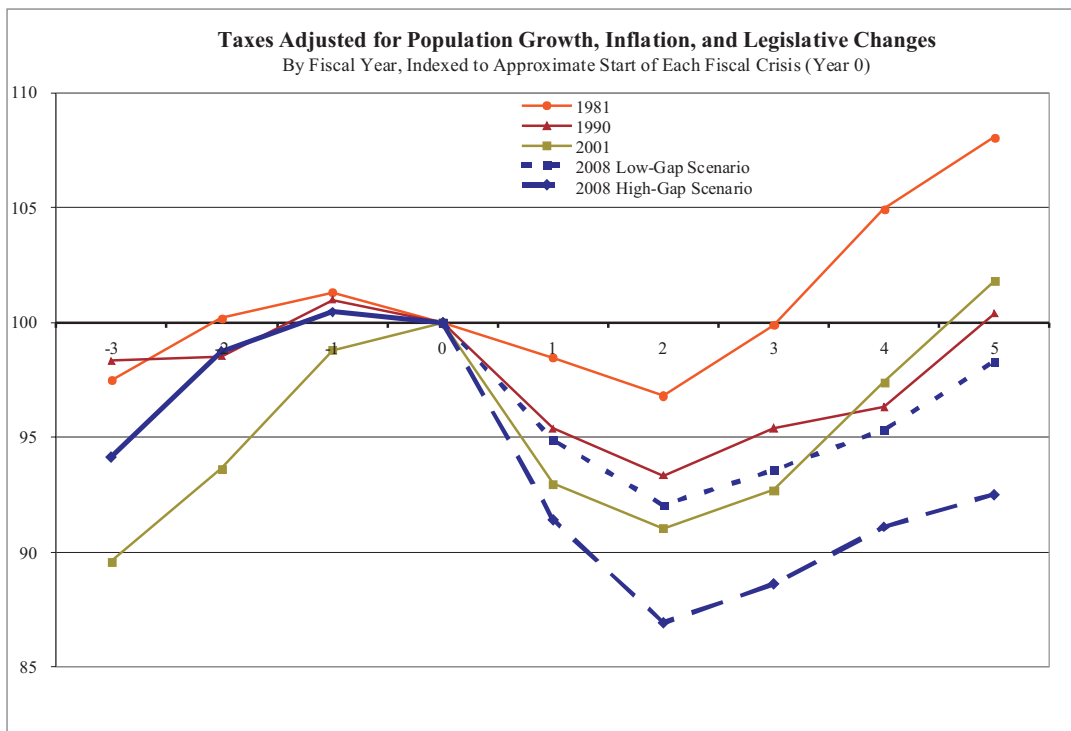
As the figure shows, tax revenue generally follows a U-shaped pattern after a recession, falling sharply for two or possibly more years before beginning to recover. The 2001 recession is notable both for the depth of the decline and the sharpness of the recovery, for reasons we have written about elsewhere.<sup>8</sup> In the last two recessions it has taken at least five years for tax revenue (as adjusted here) to re-attain its pre-crisis peak.

The low-gap scenario begins less sharply than the 2001 fiscal crisis, which itself was the worst fiscal crisis in a generation. Although the 2001 recession was mild, capital gains fell by 48 percent in 2001, contributing to a year-over-year income tax decline of 15 percent in the January-March 2002 quarter that was followed by a 22 percent decline in the April-June quarter. The low-gap scenario assumes that the income tax declines by 10 percent in January-March 2009 and by 15 percent

in April-June 2009. These would be the second-worst declines over the 40 years for which we have quarterly data, second only to the 2002 declines. They are far worse than the declines during the great bear market of 1973-74 and are well within the range of what estimators might consider reasonable, particularly given that the worst of the 2008 stock market decline occurred late in the year and capital gains realized earlier in the year may offset some of the later declines. The sales tax is assumed to decline by three percent on average in the final two quarters of 2008-9 and by another three percent in 2009-10. In subsequent years, tax revenue is assumed to recover more slowly than in the 2001 crisis because of the deeper and longer recession. The low-gap scenario is roughly consistent with annual budget gaps of \$80 billion or more.

The high-gap scenario assumes the fiscal downturn will be worse than the 2001 downturn and will last longer. It is designed to be roughly consistent with cumulative budget gaps of \$370 billion over the next 2.5 years. The income tax is assumed to decline by 20 percent year-over-year in the current quarter and by 25 percent in the April-June quarter, suggesting the worst declines in capital gains in the 50 years of recorded history. The sales tax declines of the fourth quarter of 2008 worsen in the first two quarters of 2009, averaging 10 percent year over year. Income and sales taxes then decline further in 2009-10, making this the worst two-year period by far in over 50 years. Tax revenue finally begins to recover in 2010-11 as the recovery takes hold, but sales taxes in particular grow relatively slowly during the recovery as consumers work to restore savings and assets after massive losses in their stock market holdings and home values. This is not a worst-case scenario.<sup>9</sup>

**Figure 1. State Tax Revenue Takes Several Years to Recover After a Recession**



## Resulting Fiscal Gaps, Before and After Stimulus Aid

This analysis combines the projections of tax revenue under these scenarios with projections of baseline spending and the impact of the federal stimulus package.<sup>10</sup> We use Census Bureau data on state government general revenue and general expenditure, which is a more comprehensive definition of state finances than the general fund usually discussed in the press.<sup>11</sup> Baseline Medicaid expenditures and related federal reimbursements are assumed to grow between 7 and 8 percent each year, consistent with federal Medicaid projections and with information from states, while other spending is assumed to grow more slowly than the economy.<sup>12</sup>

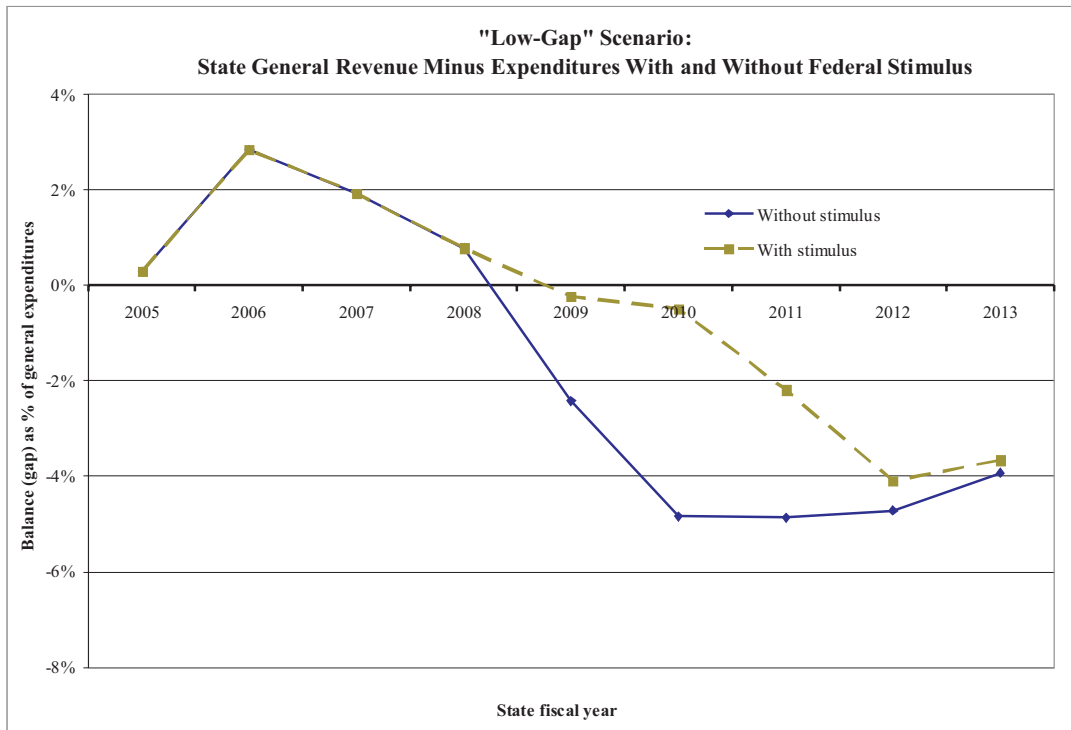
In both the low-gap and high-gap scenarios, nominal tax revenue declines in both 2008-09 and 2009-10, albeit more severely in the high-gap scenario. However, other sources of revenue such as fees, miscellaneous revenue, and federal reimbursements for Medicaid and other activities continue to grow, so that total revenue grows slightly in the low-gap scenario (about 1.5 percent in each year) and is essentially flat for two years in the high-gap scenario. But baseline spending — before any cuts states choose to make in response to the crisis — grows in both years. The scenarios assume that baseline spending grows slightly faster than population growth plus economy-wide inflation, consistent with historical trends. Resulting growth in baseline spending ranges from 4 to 4.8 percent annually in the two scenarios, which is faster than nominal economic growth in 2009-10 and 2010-11, but slower than nominal economic growth in 2011-12 and 2012-13. The combination of flat or declining revenue plus growing baseline spending leads to fiscal gaps under both scenarios.

The federal stimulus package is assumed to be used by the states almost entirely for fiscal relief rather than to support new programs — all of the Medicaid enhancement, all of the State Fiscal Stabilization Fund, and one-half of construction funds are assumed to substitute for spending cuts or tax increases that the states would otherwise implement.<sup>13</sup> (If states use more of the aid for new programs, larger cuts in other spending or greater tax increases would be needed after the money runs out than implied below.) Under these assumptions, the package provides about \$34 billion of fiscal relief to states in state fiscal year 2008-09, \$71 billion in 2009-10, and \$45 billion in 2010-11, followed by much smaller amounts for several years.<sup>14</sup>

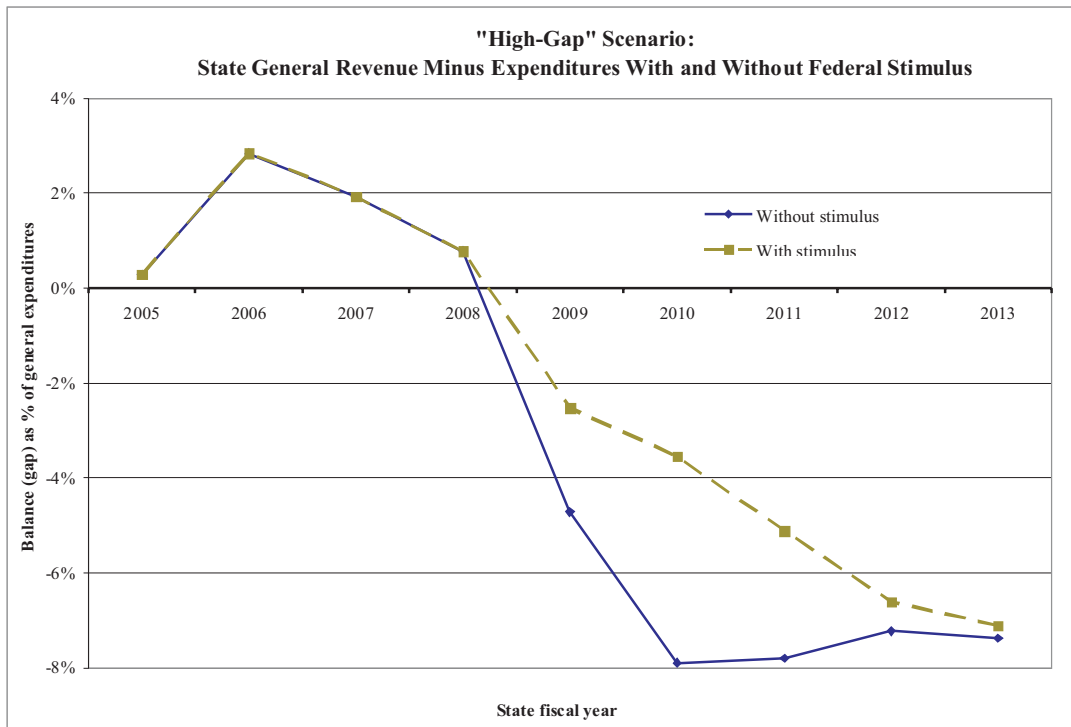
Figure 2 shows the net fiscal impact of these assumptions for state governments for the nation as a whole under the low-gap scenario. The solid line shows the baseline fiscal gap without the stimulus package, and the dashed line shows the remaining fiscal gap after aid is used for fiscal relief. Under the assumption of a fiscal crisis that falls between the 1990 and 2001 crises in severity, the fiscal stimulus package comes close to filling the state fiscal gaps in 2008-09 and 2009-10 and reduces the 2010-11 gap from 4.9 percent of expenditures to a more manageable 2.2 percent.<sup>15</sup> But after that, even in this low-gap scenario, state fiscal problems grow significantly in 2011-12 after the stimulus package wanes, with a fiscal gap of 4 percent of general expenditures despite the recovering economy and state tax revenue. This is roughly comparable to annual gaps of \$70 billion. If states adopt recurring expenditure cuts or recurring tax increases over the next two years these outyear gaps would be smaller.

Figure 3 shows the net fiscal impact for state governments under the high-gap scenario — considerably more severe than the 2001 crisis, but by no means a worst-case scenario. The stimulus package reduces the state fiscal gaps significantly for three years, although the 2010-11 gap still ex-

**Figure 2. After Stimulus Wanes, Gaps Could Approximate 4 Percent of Spending, or \$70 Billion, Even Under the Low-Gap Scenario**



**Figure 3. After Stimulus Wanes, Gaps Could Approach 7 Percent of Spending, Or \$120 Billion, Under the "High-Gap" Scenario**



ceeds \$60 billion. In 2011-12, as the stimulus relief nearly disappears, the fiscal gap balloons to more than 6 percent of state general expenditures, and exceeds \$100 billion.

## Conclusions

While the federal stimulus package is a huge boon to the finances of state governments, even under optimistic assumptions it is not large enough or sustained enough to eliminate the need for significant state spending cuts or tax increases. Tax revenue is unlikely to recover sharply enough or significantly enough — based on analysis of the last three recessions — to replace the stimulus funds that disappear.

Under a low-gap scenario that assumes a fiscal crisis that is milder but longer than the last one, states would face gaps in three years of about 4 percent of general expenditures — \$70 billion or more — and would need to cut spending or raise taxes by this much to bring budgets into balance.

Under a high-gap scenario, with a crisis that is both deeper and longer than the severe 2001 fiscal crisis and is consistent with budget gaps of nearly \$370 billion over the next 2.5 years, states could face budget gaps exceeding \$120 billion in three years.

States should use stimulus aid to help them make orderly decisions about how to trim spending and/or raise taxes, but cannot count on the stimulus package as a substitute for these actions. The economic and revenue picture for states is uncertain. Estimates of new funding available for budget-balancing purposes are imprecise at this point. Under any likely scenario, however, major fiscal problems for states will return when the new aid from Washington runs out. Budget gaps in fiscal 2012 will likely rival the critical shortfalls that states faced before enactment of the new stimulus package. Cuts or reductions in growth of spending on education, health care, and other programs, and/or major tax and other revenue increases, will almost certainly be on the table once again.

## Endnotes

- 1 See Elizabeth McNichol and Iris J. Lav, “State Budget Troubles Worsen,” Center on Budget and Policy Priorities, Washington, DC, January 29, 2009. For a comparison of budget-gap concepts, see Elizabeth McNichol and Iris J. Lav, “Current and Projected State Budget Deficits: NCSL, NASBO and CBPP,” Center on Budget and Policy Priorities, Washington, DC, February 4, 2009.
- 2 See Douglas Elmendorf (director of the Congressional Budget Office), Letter to Honorable Nancy Pelosi with estimated annual budgetary impacts of the conference agreement for H.R. 1, Washington, DC, February 13, 2009.
- 3 Tax revenue for 2008-09 was estimated using actual revenue for the third quarter of 2008 (the first fiscal quarter); data for the fourth quarter of 2008 based on preliminary data for 40 states collected by the Rockefeller Institute of Government through February 12, 2009; and projections of a falloff in revenue in the first two quarters of 2009 that is slightly less severe than the falloff after the 2001 recession and stock market selloff. The 2009-10 projections assume declines of 3 percent and 2 percent in sales and income taxes, respectively. After that, tax revenue resumes its growth, but does not quite keep pace with economic growth.
- 4 Tax revenue for the first two quarters of 2008-09 was estimated as in the low-gap scenario. Tax revenue in the last two quarters of the fiscal year (January-March and April-June of 2009) was assumed to fall even more sharply than it did in the comparable years of the 2001 fiscal crisis. Tax revenue in 2009-10 and 2010-11 falls and then begins to recover in a manner consistent with budget gaps of \$370 billion over the period from 2008-09 through 2010-11.
- 5 Thus, the graph shows real per-capita tax revenue under constant law.
- 6 The graph legend box shows the actual year corresponding with Year 0.
- 7 It also appears to have been far sharper than in earlier post-World War II recessions, but they are not shown here because (a) the graph would be overwhelming, and (b) reliable data for legislative adjustments for these earlier years are not readily available.
- 8 Donald J. Boyd, “What Will Happen to State Government, Finances in a Recession?,” The Nelson A. Rockefeller Institute of Government, January 30, 2008.

- 9 Under the assumptions here, annual budget gaps would approximate \$130 billion. The Center on Budget and Policy Priorities has estimated that annual deficits could approach \$180 billion, and gaps of this magnitude certainly seem possible.
- 10 Traditionally the direct impacts of recessions on spending are much less significant than the impacts of recessions on tax revenue. See, for example, Leslie McGranahan, "State budgets and the business cycle: Implications for the federal balanced budget amendment debate," *Economic Perspectives*, Federal Reserve Bank of Chicago, Third Quarter 1999.
- 11 This is similar in important respects to the approach of the Governmental Accountability Office (GAO) in several studies, although those studies are far more extensive than is practical here. See GAO, "State and Local Governments: Growing Fiscal Challenges Will Emerge During the Next 10 Years," GAO-08-317, January 2008; GAO, "State and Local Fiscal Challenges: Rising Health Care Costs Drive Long-term and Immediate Pressures," GAO-09-210T, November 2008; and GAO, "Update of State and Local Government Fiscal Pressures," GAO-09-320R, January 2009.
- 12 For CBO Medicaid assumptions see Robert A. Sunshine, "The Budget and Economic Outlook: Fiscal Years 2009 to 2019," Testimony before the United States Senate Committee on the Budget, January 8, 2009.
- 13 States have a history of reducing or deferring capital spending in recessions, although the extent of this varies from recession to recession. For a recent discussion see Allison Armour-Garb and Thomas Gais, "Stimulus Could Boost School Construction," The Nelson A. Rockefeller Institute of Government, February 2009. For an earlier analysis see Roy Bahl, Larry DeBoer, and Dana Weist, "Inflation, the Business Cycle and State and Local Government Finances," Metropolitan Studies Program, Occasional Paper 90, Maxwell School, Syracuse University, 1985. In Leslie McGranahan's "State budgets and the business cycle: Implications for the federal balanced budget amendment debate" (*Economic Perspectives*, Federal Reserve Bank of Chicago, Third Quarter 1999), the author concludes that states' ability to decrease capital spending is an important element of state response to recessions.
- 14 The year-by-year amounts are based on CBO-estimated amounts for federal fiscal years, adjusted by the author to a state fiscal year basis. See Douglas Elmendorf, Letter to Honorable Nancy Pelosi, February 13, 2009.
- 15 This analysis is for the nation as a whole. Even in this low-gap scenario, many states are likely to find themselves with significant budget gaps remaining after the federal stimulus aid, while some other states might find that they have additional funds available.

## **About The Nelson A. Rockefeller Institute of Government's Fiscal Studies Program**

The Nelson A. Rockefeller Institute of Government, the public policy research arm of the State University of New York, was established in 1982 to bring the resources of the 64-campus SUNY system to bear on public policy issues. The Institute is active nationally in research and special projects on the role of state governments in American federalism and the management and finances of both state and local governments in major areas of domestic public affairs.

The Institute's Fiscal Studies Program, originally called the Center for the Study of the States, was established in May 1990 in response to the growing importance of state governments in the American federal system. Despite the ever-growing role of the states, there is a dearth of high-quality, practical, independent research about state and local programs and finances.

The mission of the Fiscal Studies Program is to help fill this important gap. The Program conducts research on trends affecting all 50 states and serves as a national resource for public officials, the media, public affairs experts, researchers, and others.

This report was researched and written by Senior Fellow Donald J. Boyd. Michael Cooper, the Rockefeller Institute's director of publications, did the layout and design of this report, with assistance from Michele Charbonneau. Robert B. Ward, deputy director of the Institute, directs the Fiscal Studies Program.

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