How Will Future Aid Cuts Affect New England's Public Sector?

by Daniel G. Swaine

Since attaining a majority in 1995, Republican congressional leaders have consistently advocated a substantial decrease in federal fiscal assistance to the states. They have been motivated by a desire to shrink the federal deficit and induce states to undertake a larger share of fiscal responsibilities. In their view, many governmental functions currently performed at the federal level would be more effectively carried out at the subnational level.

If federal assistance to the states were to shrink dramatically, would states force their municipalities to bear the resulting fiscal burden by cutting local aid? In this issue, Fiscal Facts speculates on the degree to which the New England states might adjust their levels of local aid in response to federal aid cuts. We do this by analyzing the states' behavioral response to the negative revenue shocks generated by the last recession. Specifically, we address the following questions:

1. If federal assistance were to be reduced, by how much would state revenues decline?
2. Were recent recessionary revenue shocks comparable in magnitude to contemplated cuts in federal aid?
3. In reacting to these revenue shocks, how much did states cut local aid relative to state-provided services, and what was the impact on local revenues?
4. What inferences can be drawn from this analysis about states' likely responses to possible future reductions in federal aid?

Evaluating the likely responses is extremely difficult, given the unprecedented scale and structure of the contemplated decreases in federal assistance and the uncertainties inherent in forecasting. Consequently, inferences should be drawn with caution. Revenue shocks faced during recessions are short-term, while the proposed reductions in federal aid would be permanent. Behavioral responses to temporary revenue shocks may be quite different from responses to permanent shifts in the growth path of revenues. In addition, the federal government targets its aid and places restrictions on its use (although proposals for reducing federal aid would loosen these "strings" substantially), while general fund revenues have no such restrictions. This is an important distinction, although both casual observation and academic research suggest that federal funds are fungible, implying that restrictions are not fully effective in constraining the use of federal assistance. Nevertheless, responses to general revenue shocks might differ from responses to changes in the level of federal aid.

Reduction in State Revenues

In the budget passed by the Congress in 1995, but subsequently vetoed by President Clinton, federal aid to the states would have been cut by 26 percent. Most analysts believe that, if enacted, reductions in federal aid would range from 15 to 25 percent. How a reduction of this magnitude would affect state revenues varies with each state's dependence on federal funds. As Chart 1 shows, federal funds comprise approximately 25 to 35 percent of the revenues of the New England states. Thus, a 15 to 25
New England States Vary in Their Dependence on Intergovernmental Aid  
Fiscal Year 1993

<table>
<thead>
<tr>
<th></th>
<th>Federal Aid as Percent of State Revenues</th>
<th>State Aid as Percent of Local Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>30%</td>
<td>10%</td>
</tr>
<tr>
<td>Maine</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>40%</td>
<td>25%</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Vermont</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>


The New England States vary in their dependence on intergovernmental aid. A percent cut in federal aid would translate into an estimated 4 to 9 percent reduction in state revenues.

Past Fiscal Shocks

Fiscal shock is measured here as the difference between actual revenues and what revenues would have been if they had grown at a constant rate. Over the last business cycle, most New England states enjoyed extraordinary revenue growth during the 1980s followed by extensive shrinkage during the late 1980s and early 1990s. During the boom phase of the cycle, revenues peaked at levels 8 to 12 percent above trend, while during the bust phase, they bottomed out at 5 to 12 percent below trend. The estimated 4 to 9 percent revenue shock from federal aid cuts, referred to above, would overlap much of this 5 to 12 percent range.

Adjustments to Past Shocks

Three patterns of spending adjustment were exhibited in New England during the last recession:

- In Connecticut and Maine, local aid and state-provided services fell below trend by roughly the same proportions — 14 percent in Connecticut and 10 percent in Maine (see Chart 2). Since state aid accounts for about 30 percent of municipal revenues in both states, the implied impact on local revenues was a negative shock of about 4 percent in Connecticut and 3 percent in Maine.

---

1 Economists generally evaluate the cyclical behavior of the economy using the difference in actual output from trend output. The residual from a semi-logarithmic trend equation, with the log of output as the dependent variable and time as the independent variable, captures this difference in percentage terms. We use the same approach here for revenues. A technical appendix to this article, available upon request, provides additional detail.

2 A question that might also be asked is the extent to which spending reflects revenue shocks. Since most states have budget balancing requirements, one might expect that any change in revenues would cause an equivalent change in expenditures. Because of the ability to borrow in the short run, however, this expectation may not hold. Therefore, we estimated the responsiveness of spending to revenue changes with a regression equation that employs expenditures as the dependent variable and revenues as an independent variable. (See the aforementioned technical appendix to this article for details.) For five of the six New England states, changes in revenues cause an equivalent change in spending. Only in Connecticut do we observe an expenditure response that is significantly greater than the revenue change.

3 We use a system of regression equations estimated separately for each state over the 1983-93 period to calculate this impact. The first equation uses the share of the state budget accounted for by direct state spending (excluding local aid) as the dependent variable. The second equation uses the share of state spending accounted for by local aid as the dependent variable. For both equations, the independent variable is the state budget. This equation system treats the decision facing state policymakers (the division of the budget between direct state spending and state aid to localities) as a budget allocation problem, and is directly analogous to economists' treatment of consumer demand. (For details, see the technical appendix.)
In Massachusetts, New Hampshire, and Rhode Island, local aid was reduced below trend by a smaller percentage than state-provided services. This pattern suggests that the three states attempted partially to shield local services from the stresses imposed by the economic contraction. The implied shocks to municipal revenues were minus 1.5 percent in Massachusetts, minus 0.9 percent in New Hampshire, and minus 0.7 percent in Rhode Island.

In Vermont, by contrast, local aid fell below trend by a larger percentage (12 percent) than state-provided services (6 percent). The estimated impact on local revenues was a negative shock of 3.7 percent. Evidently, Vermont attempted to spread the recessionary pain more widely across state and municipal governments than did the other states in the region.

Implications

If federal aid to each New England state were to be reduced by 20 percent and each state responded in the same way that it did to the revenue shocks generated by the last recession, what would be the impact on state and local governments? Estimates based on our analysis of states' past behavior are presented in Chart 3. A 20 percent cut in federal aid would result in state revenue reductions of between 5 and 6 percent. If states neither increased taxes nor issued long-term debt to finance current outlays, these revenue reductions would translate into 5 to 6 percent declines in state spending.

If the New England states cut spending according to the same priorities that they showed during the last recession, then, other things being equal, we estimate that municipal revenues would decline by as little as 0.5 percent in New Hampshire and as much as 4 percent in Vermont. The relatively small projected impact in New Hampshire reflects both the low level of dependence of its municipalities on state aid and the relatively high degree of protection that they enjoyed from their state government during the last recession.

Conclusion

The recent behavior of the New England states suggests that the region's local governmenst would not necessarily end up bearing a disproportionate share of fiscal pain if the federal government were to cut state aid sharply. In the fiscal adjustments made during the last recession, state governments generally did not pass on the full burden of negative revenue shocks to municipalities. On the contrary, most shared the burden or even attempted partially to protect local governments from fiscal stress. Only Vermont slowed growth in local aid significantly more than growth in state-provided services.

As noted at the beginning of this article, there are dangers in forecasting future responses to cuts in federal aid on the basis of past responses to recession-induced revenue shocks. These dangers should be kept in mind. Fiscal Facts will monitor trends in federal assistance to the New England states and the reaction of the states to any changes in these trends.
ne phrase that could be used to summarize fiscal conditions in the region is “Let the good times roll.” In almost every state, revenues are significantly exceeding projections. If the revenue wave continues through the remainder of the fiscal year, all states except New Hampshire will realize a budget surplus of from 1 to 3 percent.

With state officials remembering serious fiscal problems earlier in the decade, substantial revenue growth is not carrying over to spending. With the exception of New Hampshire, spending growth is being held to less than the rate of inflation, implying real service reductions. Connecticut, Massachusetts, and Rhode Island are exercising fiscal restraint to fund tax cuts and to hedge against uncertainty in projected revenue losses from past tax reductions scheduled to take effect in FY98.

New Hampshire’s Governor Shaheen stands apart from other New England governors in recommending an increase in spending at a 7 percent annual rate of growth over the next biennium. She would fund the increased spending with a tax hike and allocate it to K-12 education in response to a court challenge to local property tax funding. Current conditions suggest that New Hampshire will realize a small budget deficit in FY97, adding to the previously accumulated $37 million deficit, which is 3.3 percent of spending.

Vermont’s budget proposal seems rather ordinary. Modest spending growth is proposed for FY98 along with no change in spending priorities. However, the recently decided Supreme Court case (Brigham et al. v. State of Vermont) challenging local property tax funding of education makes the environment in Vermont anything but ordinary. The court ruled that local property tax funding of education was unconstitutional, but left open the question of how to properly fund education. The challenge of replacing local property tax revenues, currently 39 percent of combined state and local tax revenues, along with finding a formula to reallocate the new funds is likely to provide an extraordinary legislative year in Vermont.

### Total State Appropriations for FY97 and Governors’ Recommended Appropriations for FY98a

<table>
<thead>
<tr>
<th>State</th>
<th>FY97 Millions of Dollars</th>
<th>FY98 Millions of Dollars</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>8,375.3</td>
<td>8,243.4</td>
<td>-1.6</td>
</tr>
<tr>
<td>Maine</td>
<td>2,026.2</td>
<td>2,047.7</td>
<td>1.1</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>14,801.0</td>
<td>14,847.2</td>
<td>0.3</td>
</tr>
<tr>
<td>New Hampshire b</td>
<td>1,115.5</td>
<td>1,194.6</td>
<td>7.1</td>
</tr>
<tr>
<td>Rhode Island c</td>
<td>2,422.6</td>
<td>2,466.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Vermont</td>
<td>877.3</td>
<td>896.0</td>
<td>2.1</td>
</tr>
</tbody>
</table>

a Unless otherwise noted, includes general fund and transportation fund appropriations only. Excludes expenditure of federal grants and reimbursements.
b Includes budgeted income from sweepstakes earmarked for foundation aid and special education.
c Includes general revenue and other unrestricted funds.

Source: Official budget documents, state financial statements, and conversations with state budget officials.
Connecticut

Although spending for FY97 is expected to be $118 million higher than budgeted, greater-than-anticipated revenues should offset the additional spending. As of the end of February, total general fund and sales tax revenues, expected to decline by 2.9 percent and 4 percent, respectively, were up by 4.4 percent and 6.7 percent, respectively. Receipts from the personal income tax were up 8 percent, exceeding anticipated growth of 7 percent. State officials project a surplus for FY97, which the governor proposes to use to partially cover anticipated revenue losses from tax cuts scheduled to take effect during the FY98-99 biennium. Total own-source general fund receipts (see accompanying box) are projected to fall by 1.9 percent in FY98 and increase by just over 3 percent in FY99.

The projected revenue decline in FY98 is primarily attributed to two tax cuts. First, the corporate profits tax rate will continue to ratchet downward as scheduled (see Fiscal Facts, Fall 1995). Second, Governor Rowland is recommending further cuts in the personal income tax beyond those implemented during 1996 and 1997. Specifically, he wants to expand the width of the lower income tax bracket and exclude Social Security benefits, costing the state $365 million and $15 million, respectively, in FY98. He has also called for a reduction in the gasoline tax from 39 to 34 cents per gallon, estimated to reduce transportation fund revenues by $65 million in FY98. As a result of these various scheduled and proposed tax reductions, personal income tax receipts are expected to decrease by 2 percent, corporate income tax receipts by 7 percent, and motor fuels tax receipts by 2 percent over the next biennium.

In addition to the transfer of surplus revenues from FY97 to FY98, Governor Rowland has recommended cutting own-source spending in order to fund his tax cut proposals. The governor’s recommendation reduces own-source general fund spending by 1.6 percent in FY98 and increases it by only 2.5 percent in FY99. The proposed spending reductions include a 10 percent biennium-over-biennium cut in grants to the state’s colleges and universities and various welfare reforms, including suspending cost-of-living adjustments and limiting general assistance benefits to unemployable adults with families. To compensate for the reduced flow of gas tax receipts into the transportation fund, the governor would also transfer $45 million in highway patrol operating expenses to the general fund, replace three rail lines with more economical bus service, and increase bus and rail fares by 25 percent and 9 percent, respectively, over the next two years. Finally, the governor has proposed shifting $37 million from other spending sources to education. This additional appropriation would be used to improve and desegregate schools as required by the recent Sheff v. O’Neill court ruling, which addressed the issue of regional racial isolation.

Christine Gagliardi

In this issue of Fiscal Facts, we make three changes:

• First, in the Six-State Review, we look at spending financed from own-source revenues, as opposed to spending financed from all sources, the measure previously reported. Own-source spending excludes federal revenues. It reflects the state legislature’s priorities and comes out of funds levied on the taxpayers to whom state legislators are held accountable. With this change, the numbers reported in the state summaries are consistent with those in the table on page 4.

• Second, we provide comparisons of actual revenue growth rates to predicted growth rates. These comparisons tell us about both the state of the economy and the reasonableness of revenue forecasts.

• Third, we add projections of the possible year-end surplus or deficit that will result if spending equals the baseline revenue forecasts.
Maine

Revenues remained strong eight months into FY97. As of the end of February, total general fund receipts, expected to grow 1.6 percent, exceeded year-ago levels by nearly 4 percent. Corporate income tax revenues, originally expected to increase by 5.6 percent, grew by nearly 33 percent, largely because state officials overestimated revenue losses from the state's investment tax credit. Sales tax receipts were up 5 percent, falling short of projected growth of 5.8 percent. Personal income tax collections, expected to decline by 0.8 percent, grew 1.7 percent year over year. State budget officials project a general fund surplus for the year of $15.8 million, roughly 1 percent of spending.

Total general fund tax revenues are projected to increase about 3.5 percent annually during the FY98-99 biennium. In FY98, sales and individual income tax receipts are forecasted to increase by 8 percent and 7 percent, respectively, over FY97 levels. FY98 corporate income tax receipts are expected to exceed FY97 levels by 30 percent as a result of the aforementioned overestimate of the revenue loss from the investment tax credit.

In January, the Appropriations Committee approved Governor King's $14.5 million supplemental budget. For the 1998-99 biennium, he submitted a $3.8 billion budget proposal, recommending total own-source spending growth of 1.1 percent in FY98 and 6.4 percent in FY99. These spending increases reflect a shift to own-source financing of expenditures as a result of the loss of federal assistance from the repeal of the hospital gross receipts tax, set for July 1, 1997.1 Through special financial arrangements, receipts from this tax have been used to generate federal Medicaid grants and transfer them to the state's general fund (see Fiscal Facts, Winter 1997).

The governor has recommended repealing the income tax cap, scheduled to go into effect on July 1, 1997. The cap, designed as a tax-cutting measure, would save taxpayers an estimated $131 million over the next two years (see Fiscal Facts, Fall 1995). The governor has proposed an alternative tax cap that would set state and local tax revenues at a fixed percentage of statewide personal income. This would effectively limit the growth of total tax collections to the rate of growth in personal income. Finally, the governor has proposed to double the cigarette tax rate to 74 cents per pack, with the projected revenue gain used to finance an income tax cut and to develop an anti-smoking campaign.

Christine Gagliardi

Massachusetts

Continuing the record pace set last year, Massachusetts collected tax revenues of $7.9 billion (through February), up 8.3 percent over a year earlier and above the 5 percent growth forecasted by the Massachusetts Taxpayers Foundation (MTF). If current trends continue, the state will end FY97 with a $392.1 million surplus, or about 2.6 percent of spending. Consistent with robust economic growth, collections were strong across the board, but sales tax collections were especially strong, up 12.2 percent over a year earlier to $1.9 billion, and significantly above the projected growth rate of 5.9 percent. At $379.1 million, corporate tax collections were unexpectedly high, up 5.9 percent over a year earlier. However, MTF projects a decline in corporate taxes of 1.3 percent as a result of recently enacted tax cuts. With continued labor market strength, personal income tax collections were up 7.8 percent from a year earlier.

For FY98, Governor Weld has proposed an own-source-revenue budget of $14.85 billion, a scant $46.3 million, or 0.3 percent, increase over the adjusted FY97 spending level. According to a New England Economic Project forecast, inflation is expected to be about 2.7 percent. Therefore,

1Our definition of own-source spending excludes federal revenues. Therefore, a shift from federal revenue financing to own-source revenue financing makes it look as if spending were increasing.
own-source spending would decline 2.4 percent in real terms. Governor Weld has proposed some changes in spending priorities, including new initiatives in human services and local aid to schools. The administration has touted a $347.6 million (4.9 percent) increase in the human services budget. However, factoring in federal reimbursements from the new welfare rules, spending would increase $147.6 million, or 2.1 percent. Local aid would increase by $302.4 million, or 8.7 percent, with $247.5 million earmarked for education as required by the 1993 education reform act. Since the governor has vowed not to raise taxes, spending cuts would pay for the new initiatives.

In addition, Governor Weld has proposed five new tax cuts: (1) increasing the deduction for dependent children by $1,000 per filer (2) eliminating the 5.95 percent income tax on military retirees; (3) eliminating the 14 percent investment income tax on life insurance companies; (4) cutting the rate on unearned income from 12 percent to 5.95 percent; (5) eliminating the 5 percent sales tax on telecommunications services. The Weld administration estimates that these tax cuts would cost the Commonwealth $82 million in FY98 and $640 million per year after a five-year phase-in period. An additional 10 percent cut in the unemployment insurance tax rate, supported by the administration, is currently under consideration by the legislature and is estimated by MTF to cost $90 million.

**New Hampshire**

Eight months into FY97, the outlook for New Hampshire's tax revenues was generally healthy. Total tax collections were 10 percent over year-ago levels compared with a 7 percent projected rate of growth. The business profits tax posted growth of 10.5 percent, compared with a forecasted decline of 3 percent. Only the meals and rooms tax performed relatively poorly: Expected to grow by 10 percent, receipts from this "tourist" tax were up a disappointing 5 percent.

In mid-February, Governor Shaheen submitted her budget proposal for FY98-99. The proposal calls for own-source spending of $2 billion in FY98, up 7 percent over FY97, and $2.1 billion in FY99, up an additional 3 percent over FY98. A $1 million deficit is forecast for FY98, but FY99 is projected to end with a $2.4 million surplus. The biggest increase in expenditures is $68 million in state aid to cities and towns, with most of this amount allocated to schools. Included is $20 million in kindergarten aid, doubling the amount of spending per kindergarten pupil from $500 to $1,000. The state will use $30 million, already in a highway surplus account, to leverage federal dollars available for major road and bridge projects. Finally, Governor Shaheen introduced a bonding bill to raise $30 million to finance the construction of new kindergarten classrooms and 75 percent of the construction costs to add classroom space to existing kindergartens.

Two tax initiatives were included in the budget package. The governor has proposed a doubling of the cigarette tax from the current 25 cents to 50 cents a pack, effective April 1, 1997. The tax increase would generate $12 million before the end of the current fiscal year and would then raise an additional $47 million in each of the next two years. Another tax initiative proposed by the governor would extend, for two more years, the "temporary" tax rates of 8 percent on meals and rooms, 0.5 percent on real estate transfers, and 5.5 percent on communications services. If this proposal is not passed, those rates would drop back to 7 percent, 0.35 percent, and 3 percent, respectively, costing the state $80 million in revenue.

**Rhode Island**

Through the end of February, Rhode Island had collected $854.1 million in FY97 revenues, up 6.2 percent from a year earlier and slightly ahead of the 4.4 percent projected growth. If this pace is sustained, the state will end FY97 with a surplus of $24.1 million, or about 1 percent of spending. Both personal income and sales tax collections were close to target. Corporate tax receipts were up a surprising 5.8 percent. Officials had anticipated that previously enacted tax cuts would preclude growth in this revenue source.

For FY98, Governor Almond has proposed own-source spending of $2,466.4 million, 1.8 percent higher than his recommendation for FY97. Programs that would enjoy relatively large percentage increases in funds include the renovation of state buildings, the establishment of technology assistance centers, and transportation (the proposal would partially substitute tax financing for bond financing of capital projects in order to improve the state's credit rating). These increases would be financed partially with cuts in expenditures for general government and higher education.

Governor Almond has also proposed an ambitious series of new tax initiatives, including an income tax cut...
and increases in two business tax credits. His proposal cuts the income tax rate from 27.5 percent to 25 percent of federal liability over a five-year period. This would reduce revenues by approximately $55 million when fully implemented. He justifies this proposal largely as a means of reducing the average income tax burden on households in the state’s highest income tax bracket, characterized in many studies as one of the highest in the nation. Governor Almond also wants to increase the research and development (R&D) tax credit from 5 percent to 22.5 percent and the investment tax credit (ITC) from 4 percent to 10 percent. These proposed tax credit changes are designed to improve Rhode Island’s competitiveness with Connecticut, which has R&D and ITC credits of 20 percent and 10 percent, respectively. In addition, the governor has proposed to reduce the sales tax from 7 percent to 6.5 percent, conditional upon an improvement in the next set of official revenue estimates for FY98, to be released in May.

Daniel G. Swaine

Vermont

Through February, Vermont tax receipts totaled $471.8 million, up 8.7 percent from a year earlier and significantly higher than the projected growth rate of 4.1 percent. If current trends continue, the state will end FY97 with a $30 million surplus, or about 3.4 percent of spending. Year-over-year growth rates of 13.6 percent in personal income tax receipts and 15.1 percent in corporate income tax receipts were especially surprising to forecasters. The only revenue source whose growth has fallen short of expectations has been the sales tax, up only 1.5 percent in comparison with projected growth of 3.2 percent. A disappointing ski season, due to a relatively warm, dry winter, was responsible. If total revenues continue to exceed projections, the governor will recommend an additional deposit into the state’s stabilization fund.

For FY98, Governor Dean has submitted an own-source revenue budget of $896 million with no significant change in spending priorities, an increase of 2 percent over FY97 levels. With past revenue shortfalls still a recent memory, the governor has proposed to deposit another $10 million into the stabilization fund during FY98, increasing the balance to a projected $21.2 million (2.4 percent of the budget).

In a landmark decision, the Vermont Supreme Court recently ruled on Brigham et al. v. State of Vermont, challenging the state’s current system for funding local education. The court argued that, because of extreme disparities in taxable property wealth across Vermont’s school districts, reliance on local property taxation to finance education violates the state constitution’s guarantee of each student’s right to a “well-funded education on substantially equal terms.” The court left it up to the legislature to craft a tax system that would pass constitutional muster.

In a comprehensive reform proposal that is wending its way through the state legislature, the $440 million currently collected from local property taxes would be raised through a variety of other taxes. A two-tiered statewide property tax, with rates of 1.31 percent on non-residential property and 0.44 percent on residential property, would raise $292 million. An increase in the sales tax rate from 5 to 6 percent combined with an expansion of consumption tax bases would raise an additional $65 million. Another $85 million would be obtained by giving municipalities the option of imposing their own income taxes, whose estimated average rate would be 8 percent of federal tax liability (the state personal income tax is a flat 25 percent of federal tax liability).

Daniel G. Swaine

Federal Reserve Bank of Boston
P.O. Box 2076
Boston, MA 02106-2076
Address Corrections Requested