February 21, 2015

From: Gerald Friedman, Professor of Economics and Department Chair, the University of Massachusetts at Amherst

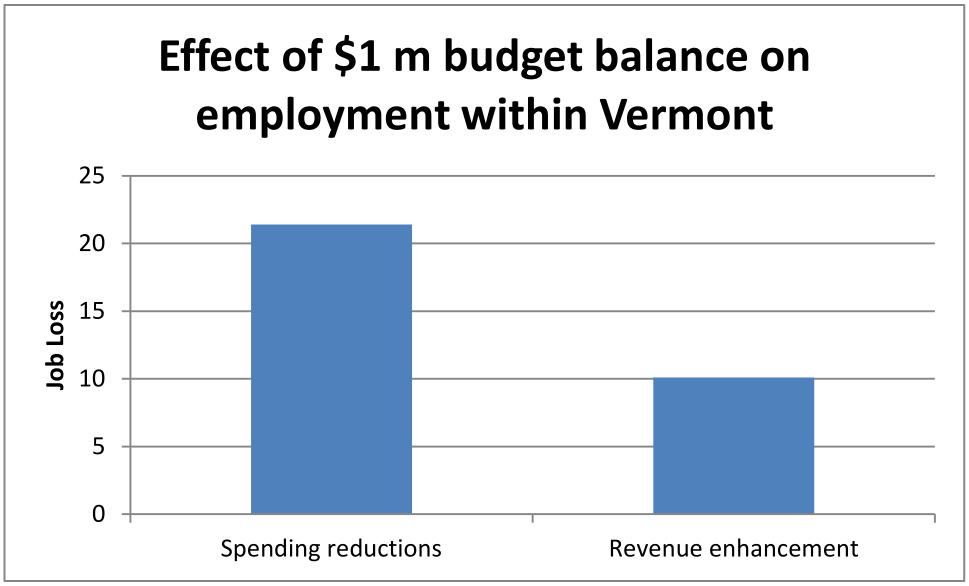
Re: Employment impact of alternative Vermont state government policies

1. **Context: State budget balance and state employment.**
   While tradition and pressure from bond holders mandate an annual balanced budget, there are different ways to achieve this goal. States can reduce spending, raise taxes and fees, draw down savings, or find new sources of outside revenue. While the bottom line of a balanced budget can be the same, the effects on state income and employment can be dramatically different depending on whether balance is achieved with revenue enhancements or spending reductions. By taking money out of the community and reducing disposable income, all budget balancing policies reduce state income and employment, and the effects are magnified by a "multiplier" where others lose their jobs when spending is reduced by people laid off by the state or facing higher tax bills, and reduced state income than lowers state revenues and requires higher state safety-net spending that forces further action to achieve budget balance.

2. **Employment impact of alternative policies.**
   While all budget balancing policies hurt, different state policies can magnify or mitigate the effects on Vermont employment. The issue is that alternative policies allocate the costs of balance differently between Vermont residents and those living elsewhere. The different employment impact of state policy comes in the initial decision whether to *spend the money in state* or to give it to households who will either spend it in-state or out-of-state.

   Consider, for example, the effect of cutting state spending on employment by $1 million. State layoffs *immediately* reduce the income of Vermont residents, laid-off state employees, and then income and employment in businesses serving them. This reduction in income then has a further induced effect through the multiplier mentioned above when reductions in income lead to further reductions in spending in Vermont restaurants, shoe stores, etc. Together, using the IMPLAN program at the Political Economy Research Institute at the University of Massachusetts at Amherst, these direct, indirect, and induced effects cost a total of over 21 jobs for every $1m reduction in state spending.

   The multiplier effects of a reduction in household income from taxes or fees are similar *after* the first round but tax changes do not have the same immediate effect that state layoffs focused on Vermont residents. Tax or fee increases reduce employment on the *multiplier* side when households reduce spending by the amount of the tax or fee increase but much of this is felt outside Vermont because residents (of course, including state employees) spend much of their income outside Vermont. By missing that first round of cuts targeted at resident Vermont employees, Tax changes have a smaller effect on income and employment. The same million dollars of budget balance therefore leads to a reduction in employment of only 10 jobs if in the



form of revenue enhancements, half the effect of state layoffs and spending cuts. (The effects are even smaller, of course, if they are targeted at visitors to Vermont, through an increase in the gas tax or hotel occupancy tax, for example.)

In short, compared with revenue increases, a policy of budget cutting through state-employee layoffs will cost Vermont an additional 11.4 jobs for every $1m of deficit reduction.

This estimate is very similar to that presented by Tom Kavet to the Legislative Joint Fiscal Committee. In a memo dated November 18, 2008, Kavet reported that "A cursory analysis using the State REMI economic model shows that a $2 million dollar increase in consumer spending coupled with a $2 million reduction in state government spending actually results in a net *loss* of about 15 jobs on an annualized basis." His estimate of a net job loss of 7.5 for every $1m of budget reduction through state spending cuts is less than our estimate of 11.4 but within an order of magnitude.

3. State budgets chasing the economy downhill

The greater employment cost of state spending cuts has further effects on the state budget by lowering tax revenues and increasing the demand for state services. With nearly 10% of state personal income going to state and local spending, we might expect an additional job loss for *every* 11 layoffs. This adds one further job loss for every $1m of budget balance achieved through state spending cuts.

The employment cost of state spending cuts is *in addition* to the loss in services due to spending cuts. To the degree that these services support the well-being of Vermonters, they are reductions in real welfare. To the degree that they support market activities, by keeping the roads clear of snow, maintaining infrastructure, providing educated and healthy workers for business, state spending cuts will reduce employment further. Finally, to the extent that state employment is used to attract Federal grants to the state, cutbacks in employment lead to further reductions in state revenues, requiring further action to reduce budget deficits.

To the extent that state revenue can be enhanced through taxes or fees targeted at out-of-state households, the negative employment effects of revenue enhancement for Vermont are diminished and the comparative advantage of budget balance through revenue enhancement is increased.

Table 1. Employment reductions in Vermont associated with alternative budget balancing measures, state layoffs versus revenue enhancements.

Budget balancing	Effects of state layoffs	Effects of revenue enhancements	Extra job losses caused by state spending reductions
$5 million	145	55	90
$10 million	290	111	179
$15 million	435	166	269

Source: Implan program with an addition 10% added for effect of income reductions on state budget balance.