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Seth H. Giertz

Accelerated Depreciation and State Revenues

For state governments across the country, these are austere times. States are facing some of the worst budget shortfalls in decades, leaving legislators scrambling to bring revenues and expenditures into balance, while not upsetting their constituencies. In addition to changing economic conditions, a recent federal change granting accelerated depreciation to business threatened to eat up additional state revenue. A popular response from many states has been to decouple from the federal definition of income: i.e., not allow bonus depreciation for state taxes by moving away from the federal definition of income.

Reports from places such as the Center on Budget and Policy Priorities (CBPP) have fueled the state response. A recent CBPP report states: “A federal tax law enacted March 9, 2002 ...created a new tax deduction for ‘bonus depreciation’ that threatens to cost states very large amounts of revenue.”¹ A related report cites lost state revenues of \$14 billion through 2004.² The same report estimated the revenue loss in Illinois for this period at \$806 million.

It is shown here that the impact of the federal change is much less devastating to states than these studies suggest. In fact, the actual cost to states is only a fraction (about 18 percent) of the reported \$14 billion – more in the neighborhood of \$2.4 billion. On the flip side, losses to business from withdrawing these benefits through decoupling are also relatively minor.

The bonus depreciation allowance emanates from the economic stimulus bill approved this past March and permits firms (both corporate and non-corporate entities) to expense 30 percent of the cost of most new investment at the time of purchase. The new rules apply to investment made from September 11, 2002 through September 11, 2004 and are designed to spur investment in the short-run to combat the recession that began in 2001.

The measure generated considerable concern from many of the 46 state governments whose tax bases are tied to the federal definition of income. In response to potential losses reported by the CBPP and others, some policy experts urged states to decouple from federal depreciation rules. Many states have followed this advice. As of late July, 28 states (plus the District of Columbia) have decoupled.

The major feature of the new law, overlooked by many, is that the total amount of depreciation allowed (which in turn reduces tax liability) has not changed, only its timing is different. Bonus depreciation allows firms to capture the tax savings earlier rather than later. In general, overall

¹ Nicholas Johnson, “Many States Are Decoupling from Federal Bonus Depreciation Tax Cut,” Center on Budget and Priorities, July 17, 2002.

² Iris J. Lav, Elizabeth McNichol, and Nicholas Johnson, “Preserving State Revenue from the Effects of Recent Federal Legislation: States Can ‘Decouple’ from Federal Tax Changes,” Center on Budget and Priorities, May 1, 2002.

tax liability has not been reduced – only its time path has changed.³ Firms will pay less tax during the early years of an asset's life and more in later years (because write-offs will be lower in these later years). This clearly benefits firms and results in a loss to governments since it reduces the present value of firms' tax liability; but, the size has been grossly exaggerated. (It should be noted that, at the federal level, the Joint Committee On Taxation and others have been clear to point out both the drop in federal revenues through 2004 as well as the concomitant increase in revenues beginning in 2005.)

The JCT estimates that the allowance will reduce federal tax revenue by a total of \$102.3 billion through fiscal year 2004. On a smaller scale, the CBPP estimates the allowance would reduce state revenues (without decoupling) over this same period by the previously mentioned \$14.0 billion. However, reporting only the tax dollars lost upfront (as the state studies do), without acknowledging additional tax dollars from later periods, provides a misleading picture.

This is not to say that revenue losses in years 2002 through 2004 do not represent a hardship to state governments. States across the country are experiencing budget shortfalls. Under normal borrowing constraints, the small long-run loss to states can easily be redistributed intertemporally. But states often subject themselves to balanced-budget requirements, which make borrowing more difficult. This could justify placing greater weight on the upfront drop in tax revenue – which, all else equal, would lend support for decoupling. (Often, states have *operating balanced budgets* – which generally exclude capital expenditures and sometimes make allowances for future revenue streams. States can oftentimes manipulate what falls under the capital expenditure category in order to increase short-term spending.)

That said, when the full picture is examined, the impact on revenues is considerably less severe. Using a four percent discount rate, the allowance increases the present value of tax savings from depreciation deductions from between 1.1 percent for investments with a three-year depreciation schedule to 11.8 percent for investments with a twenty-year life.

For years 2005 through 2012, the JCT projects federal corporate tax revenue to be \$75.6 billion (or \$62.0 billion when discounted to present value) greater as a result of accelerated depreciation in years 2001 through 2004. Thus, in terms of present value, the net loss in tax revenue is reduced from \$98.9 billion through 2004 to \$36.9 billion through 2012. Assuming a similar depreciation path after 2012, the net cost to the federal government of the accelerated depreciation allowance is about \$18.8 billion – or just 19 percent of the drop in revenue through 2004. (Looked at another way, through 2016 bonus depreciation reduces federal business tax revenue by less than 1 percent in present value terms.)

³ In fact, over the life of an investment, total dollars paid in taxes will be roughly equal. Without the 30 percent bonus in year one, the schedule for depreciation allowances follows the form:

$$\sum_{year=1}^n DepreciationAllowance_{year} = \text{total value of asset} . \text{ With the 30 percent bonus, the formula becomes:}$$

$$0.30 \cdot (\text{total value of asset}) + \sum_{year=1}^n 0.7 \cdot (DepreciationAllowance_{year}) = \text{total value of asset} .$$

If states had not decoupled and assuming their tax revenue streams parallel that of the federal government, the lost revenue from 2002 through 2004 will be fully recovered from higher revenues for years 2005 through 2016. In terms of present value, the loss to state governments would have been only \$2.4 billion (or 18.0 percent) of the \$13.4 billion (the discounted present value of the \$14.0 billion number) revenue loss contained in the forecast by the Center on Budget and Policy Priorities. For Illinois, the previously cited revenue loss estimate of over \$800 million is reduced to loss of \$145 million in present value terms when the full impact of the change is considered.

In summary, lamenting over reduced state tax revenues through 2004, without acknowledging increased revenues in the years after 2004, provides an incomplete picture – both in terms of the strain imposed on governments from the bonus depreciation allowance and on the harm done to business by decoupling. In deciding whether to decouple, states should weigh the economic benefits of the depreciation bonus against the true long-run cost to state revenues. Also, states should take into consideration additional complexity that separate depreciation rules at the state and federal level create.

This is an overblown issue that is not as important (although still not trivial) as the debate around it suggests.