

## *Fiscal Rules and Bond Yields: Do Tax Limits Raise the State's Borrowing Costs?*

In his proposed 1999–2000 budget, Governor Gray Davis underscored the growing importance of infrastructure spending as a public policy issue in California:

As California moves into the 21<sup>st</sup> Century we face the dual problem of preserving the schools, highways, bridges, water systems, and housing of today, while also planning and building new facilities for a growing population. There is no choice: we must maintain our current capital investments—"infrastructure"—and make new investments.

Most of this capital investment, which will cost the state between \$25 billion and \$50 billion over the next decade, will be financed with long-term debt. The borrowing costs on this debt will be an important factor in determining the state's overall fiscal burden.

Borrowing costs differ significantly from state to state. In *Fiscal Rules and State Borrowing Costs: Evidence from California and Other States*, James Poterba and Kim Rueben present new evidence on what determines these interstate differences. Focusing on three key factors—the unemployment rate, state fiscal rules, and unexpected deficits—the authors analyze bond market data over the last two decades to calculate the effects of these variables on borrowing costs, especially in California.

### *The Effect of Unemployment*

The authors find a clear relationship between a state's general economic health, as measured by its unemployment rate, and its borrowing costs. Because lenders expect states with economic troubles to have more difficulty servicing their debt, a 1 percent increase in a state's unemployment rate is associated with an increase of about 0.05 percent, or five basis points, in that state's bond yields. (A basis point is one one-hundredth of 1 percent.) In California, for example, the state's unemployment rate dropped from 9.4 percent

in 1993 to 5.9 percent in 1998. The authors estimate that, as a result of that development, the state's borrowing cost declined by 20 basis points, or \$2 million for every billion dollars of debt issued.

### *Fiscal Rules and Their Effects*

More significant from a policy perspective, perhaps, is the study's second major finding: that state fiscal rules, such as California's Gann amendment and Proposition 218, also play an important role in determining borrowing costs. The authors note that states with strict limits on spending or deficits have faced lower borrowing costs during the last two decades than those with looser fiscal rules. Specifically, states with strict anti-deficit fiscal constitutions pay about nine basis points less than other states to issue new debt interest.

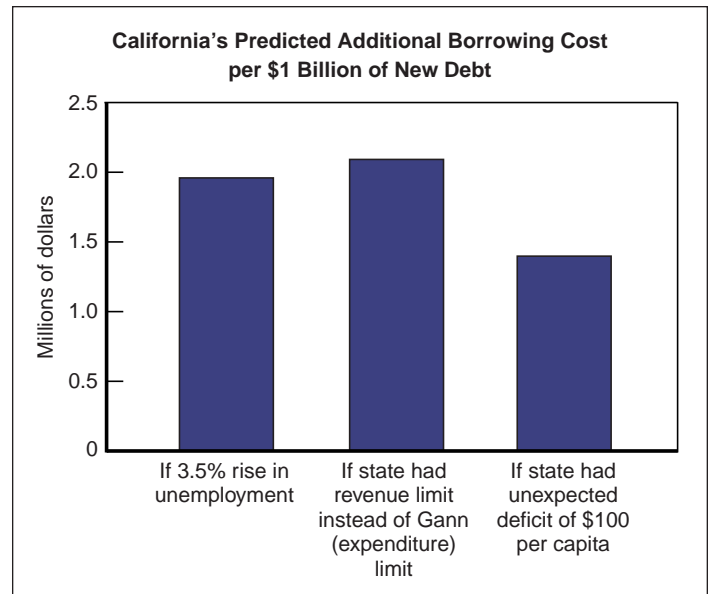
The authors also maintain that the bond market reacts differently to tax restrictions and expenditure limits. States with expenditure limits typically borrow at lower rates, but states with tax restrictions, or those that require supermajorities to increase taxes, face *higher* borrowing costs. The authors conclude that these differences reflect the added difficulty such states may experience when raising revenue to meet debt payments. Controlling for other factors that affect borrowing costs, the authors find that states with tax restrictions pay over 17 basis points more than those without such limits. This premium adds some \$1.75 million dollars of extra interest for every \$1 billion of new debt, or roughly three times the increase associated with a 1 percent rise in unemployment.

Since the passage of Proposition 13 in 1978, a legislative supermajority—in this case, a two-thirds vote in both houses—has been required to enact new taxes in California. Proposition 218, which was adopted in 1996, also provides new mechanisms for voters to restrict local taxes. These

measures put upward pressure on state borrowing costs by increasing the state's credit risk. In contrast, the Gann amendment (Proposition 4) of 1979 limits state and local expenditure growth and does not restrict state revenues; as a result, this measure tends to lower bond yields. The authors estimate that, if California had enacted tax limits rather than expenditure limits in 1979, borrowing costs would have been 20 basis points higher, on average, over the next two decades. In 1997, for example, when California had outstanding state debt of \$43.5 billion, the extra interest would have cost \$90 million.

### *The Cost of Unexpected Deficits*

The study's third major finding concerns unexpected budget deficits and how they affect borrowing costs. Because unexpected deficits make it more difficult for states to service their debt, they are correlated with upward revisions in state bond yields. This effect is particularly pronounced in California, where an unexpected \$100 per capita increase in the state's deficit has historically been associated with an increase of 14 basis points in borrowing costs. Part of this responsiveness can be explained by differences in fiscal rules. Bond yields rise less during periods of financial stress for states with tight anti-deficit rules or restrictive spending rules. Moreover, bond traders seem to be more aware of fiscal changes in states with large amounts of outstanding debt, such as California. This pattern indicates that accurate tax and expenditure forecasts are more important for California than for most other states, which bond analysts follow less closely.



### *Policy Implications*

As California begins a new round of capital investments, it is especially important to understand how the state's fiscal rules affect the overall costs of infrastructure spending. In particular, voters and legislators should recognize the effects of tax limits, expenditure limits, and changes to the state's deficit financing rules on the state's borrowing costs. Because the bond market is especially sensitive to unexpected deficits in California, the state can also minimize these costs by avoiding overly optimistic budget forecasts or by avoiding issuing debt during periods of unexpected deficits.

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*This research brief summarizes a report by James M. Poterba and Kim S. Rueben, Fiscal Rules and State Borrowing Costs: Evidence from California and Other States. The report may be ordered by calling (800) 232-5343 [mainland U.S.] or (415) 291-4415 [Canada, Hawaii, overseas]. A copy of the full text is also available on the Internet (www.ppic.org). The Public Policy Institute of California is a private, nonprofit organization dedicated to independent, nonpartisan research on economic, social, and political issues affecting California.*

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