

No. 10-71
December 2010

WORKING PAPER

TEL IT LIKE IT IS: Do State Tax and Expenditure Limits Actually Limit Spending?

By Matthew Mitchell



The ideas presented in this research are the author's and do not represent official positions of the Mercatus Center at George Mason University.

T.E.L. It Like It Is: Do State Tax and Expenditure Limits Actually Limit Spending?

By Matthew Mitchell, Research Fellow, Mercatus Center at George Mason University¹

State and local government spending has grown at a remarkable pace in the years since World War II. Many states have attempted to arrest this growth by adopting tax or expenditure limitations (TELs). These are formal rules—either codified in statutes or in state constitutions—that limit the growth of government budgets by a particular formula. Twenty-seven states currently operate under TELs, though there is considerable variation in their design and application. In this paper, I examine the impact of TELs on government spending. I focus on the details of their design and on the circumstances in which they are applied. I find that some varieties of TELs can decrease state spending as a share of state income, but the effect is small—in the range of about 2 to 3 percent. Some TELs, such as the most common variety, are associated with less spending in low-income states but are actually associated with more spending in high-income states. Certain characteristics can make TELs more effective. These include constitutional (as opposed to statutory) codification, a focus on spending rather than on revenue, a provision that automatically and immediately refunds surpluses, and—of particular importance—a provision that requires either a supermajority vote or a public vote for override.

¹ I thank Thomas Stratmann and Richard Williams for helpful comments and feedback. I thank Mark Crain, Steven Yamarik, and Noel Johnson for graciously sharing data. I alone am responsible for errors that remain.

I. Introduction

In 1976, New Jersey became the first state in the Union to enact a tax or expenditure limitation.² It was a statutory limit on state spending that forbade legislators from growing expenditures faster than state income growth. Though legislators let it expire just six years later, the New Jersey statute kicked off a new experiment in constitutionally limited government. In the next decade, nearly two-dozen states would enact TELs of their own. Today, 27 states operate under TELs, while a 28th state—Colorado—has temporarily suspended its (particularly restrictive) TEL until 2011.³ (Other states limit local spending by cities and/or counties, but this is not the focus of my research.)

Do TELs limit budget growth? Early tests of this question concluded that they do not.⁴ As time has permitted more data and more sophisticated means of testing it, however, some subsequent research has concluded that certain varieties of TELs *can* limit spending in certain circumstances.⁵ In recent years, studies of TELs have tended to follow one of two tracks. They have either looked at the circumstances in which TELs are applied, or they have looked at the properties that make some TELs effective and others less so.

Studies examining the circumstances in which TELs have been applied have tended to focus on whether TELs have a different impact in high-income states relative to low-income states.⁶ Since many TELs (like New Jersey's 1976 TEL) tie state budget growth to state income growth, scholars have hypothesized that TELs in low-income states will be more limiting than TELs in high-income states. Indeed, that is what the data suggest: TELs seem to be associated with lower levels of government

² Bails and Tieslau (2000) p. 258.

³ See Waisanen (2010) for an up-to-date accounting of TELs in the states. Some states limit the amount that can be appropriated to some share of estimated revenue. While Waisanen considers this a TEL, I do not.

⁴ See, for example, Abrams and Dougan (1986) or Bails (1990).

⁵ Elder (1992) was one of the first to conclude that TELs can limit spending. Rueben (1995) attempts to control for endogeneity and reaches the same conclusion. Not all recent studies conclude that TELs work. Kausser, McCubbins, and Moule (2008) found that TELs were “largely ineffective.”

⁶ See, for example, Shadbegian (1996) and Crain (2003).

spending in low-income states and higher levels of spending in high-income states. The latter finding is worth emphasizing: these studies have not simply found TELs to be ineffective limits on state budgets in high-income states; they have actually found that TELs are associated with *greater* than average levels of spending in high income states. It may be that in high-income states, TELs increase spending by acting as an excuse for elected officials to spend up to the limit.

A second (and less-developed) class of studies has focused on the variety of forms that TELs can take and has concluded that TELs can effectively limit budget growth, but only when they take certain forms. For example, Michael New (2001 and 2003) has argued that TELs limit spending so long as they: a) are based on the relatively restrictive “inflation plus population” formula, b) are passed by citizen initiative, c) immediately refund surpluses to taxpayers, and d) mandate reductions in the limit when the state devolves a function of government to the localities.

This study combines the two approaches described above to evaluate TELs based on where they are applied (high- vs. low-income states) and based on how they are structured. A more detailed and comprehensive dataset permits me to explore the various structures of TELs in greater detail than previous work.

II. The Wide Variety of Tax and Expenditure Limitations

No two TELs are exactly alike. Among other things, they vary according to what they limit, how they limit it, how they are enforced, how they can be overridden, how they treat surpluses, and how they can be changed.

There are a number of characteristics that might be expected to make TELs more or less effective in restraining spending. The states are listed according to these characteristics in table A1 in the appendix.

In the first place, TELs differ in their adoption method. They can be the product of legislation, a referendum, an initiative, or a constitutional convention. They also differ in how they are codified—either via statute or the state constitution. TELs also differ in what they target. Some TELs apply to spending, others to revenue, and still others to both. TELs can be overridden in different ways; some require a supermajority vote of the legislature or a vote of the people to be overridden, others can be overridden with a simple majority vote. Surpluses are another factor. Some TELs automatically and immediately refund any revenue that is in excess of the limit. Lastly, TELs differ in how they treat functions transferred to lower levels of government. Some TELs prohibit the state from placing unfunded mandates on lower levels of government. They do this by either automatically adjusting when the state transfers a function to lower levels or by requiring the state to fund any activity it requires of the lower levels.

Perhaps the most-important characteristic of a TEL is the formula by which it limits a state's budget. Table A2 in the appendix lists each state and the variety of TEL each has had since 1970 to the present (some, of course, have had none). The most common variety of TEL—currently operative in 12 states—limits state budget growth to growth in state personal income. Another variety of TEL isn't based on *growth* in income, but on the overall *share* of state income that the budget consumes. Idaho's TEL, for example, requires general fund appropriations be no more than 5.33 percent of total state personal income. Five states—Alaska, Nevada, Ohio, Utah, and Washington—currently stipulate that budgets can grow no faster than inflation plus population growth. Six other states—Connecticut, Indiana, Maine, Massachusetts, Ohio, and Oklahoma—limit their budgets to another factor such as a fixed number. Lastly, some states—such as Louisiana—fall into more than one of these categories.

III. Testing the Effectiveness of Tax and Expenditure Limitations

To assess the impact of TELs on government budgets, I used data from 49 states covering 30 years from 1977 up to and including 2006.⁷ I ran a series of ordinary least square (OLS) regressions with standard control variables and state and year fixed effects. Table 1 describes the variables in these regressions. Table 2 reports the summary statistics.

I assessed the impact of TELs on two measures of state spending: state annual expenditures as a share of total annual income, and state *and local* annual expenditures as a share of total annual income. By focusing on spending as a share of income, these variables are proxies for government's share of the economy (spending is more telling than revenue because states might attempt to circumvent TELs by borrowing more).⁸ I test the impact of TELs on both state-only expenditures as well as state and local expenditures because states may be tempted to work around TELs by forcing certain expenditures on local governments, leaving the overall size of government unchanged.

Because there is such a wide variety of TELs in operation, I performed a number of tests to see which variety—if any—is effective. These tests can be divided into three broad categories. The simplest tests involve a “dummy TEL” variable that essentially treats all TELs the same. The second set of tests allow for more or less stringency in the application of TELs. The final set of tests examines the impact of different TEL formulas. I describe each of these tests, beginning with the dummy-variable approach, in the sections that follow.

⁷ Following standard practice, I omit Alaska due to its unusual fiscal characteristics (most of its revenue comes from severance taxes on oil). See, for example, Bails and Tieslau (2000), Shadbegian (1996), or Primo (2006). For similar reasons, some scholars also omit Hawaii and/or Wyoming. See, for example, Crain (2003), note 1, p. 150. The case for these being outliers, however, is not as clear-cut as the case of Alaska (see Primo, 2006, note 31, p. 293). So in the interest of preserving data, I kept these states in the analysis. In tests that omit all three, the coefficients obtain the same sign and similar magnitude, but do not obtain the same level of statistical significance.

⁸ See Kousser, McCubbins, and Moule (2008).

Table 1. Description of Variables

Variable	Description
Dependent Variable	
State Expenditure Share	State expenditures as a share of state income in state x in year t.
State and Local Expenditure Share	State and local expenditures as a share of state income in state x in year t.
Variables of Interest	
Dummy TEL	A dummy variable equal to 1 if state x has a TEL in year t and 0 otherwise.
TEL Index	An index that measures the stringency of the TEL in state x in year t. The index is composed of the following factors: adopted by referendum or constitutional convention, adopted by initiative, constitutional, applies to spending (as opposed to revenue), requires a supermajority for override, automatically refunds surpluses, and prohibits unfunded mandates.
Supermajority or Public Vote Override	A dummy variable equal to 1 if, in year t, state x has a TEL that requires either a supermajority vote of the legislature or a public vote to be overridden. It takes the value 0 otherwise.
Inflation + Population Basis	A dummy variable equal to 1 if, in year t, state x has a TEL that limits its budget growth to the sum of inflation plus annual population growth and has a supermajority or public vote override requirement. It takes the value 0 otherwise.
Income Growth Basis	A dummy variable equal to 1 if, in year t, state x has a TEL that limits its budget growth to growth in income in the state and has a supermajority or public vote override requirement. It takes the value 0 otherwise.
Income Share Basis	A dummy variable equal to 1 if, in year t, state x has a TEL that limits its budget to some share of state income and has a supermajority or public vote override requirement. It takes the value 0 otherwise.
Other Basis	A dummy variable equal to 1 if, in year t, state x has a TEL that limits its budget growth by some other number and has a supermajority or public vote override requirement. It takes the value 0 otherwise.
Control Variables	
Population	Total population in state x in year t.
Percent 18 to 64	Share of the population aged 18 to 64 in state x in year t.
Percent Urban	Share of the population living in an urban setting in state x in year t.
Unemployment Rate	Share of the population unemployed in state x in year t.
Per capita income	Real per capita income in state x in year t (thousands of 2008\$).

Sources: Expenditure share is computed using expenditure data from the Census of Governments and personal income data from the Bureau of Economic Analysis. TEL data are derived from the sources listed in tables A1 and A2. All population data are from the Census. Unemployment data are from Bureau of Labor Statistics. Per capita income data are from the Bureau of Economic Analysis.

Table 2. Summary Statistics

Variable	Mean	Median	Minimum	Maximum	Standard Deviation
Dependent Variables					
State Expenditure Share	13.4%	13.2%	6.8%	24.1%	3.0%
State and Local Expenditure Share	20.7%	20.5%	13.0%	35.7%	3.1%
Variables of Interest					
Dummy TEL	0.37	0	0	1	0.5
TEL Index	1.21	0	0	6	1.8
Supermajority or Public Vote Override	0.24	0	0	1	0.4
Inflation + Population Basis	0.04	0	0	1	0.2
Income Growth Basis	0.12	0	0	1	0.3
Income Share Basis	0.10	0	0	1	0.3
Other Basis	0.03	0	0	1	0.2
Control Variables					
In (Population)	15.00	15.10	12.93	17.40	0.99
Percent 18 to 64	61.1%	61.2%	54.6%	65.7%	1.9%
Percent Urban	70.2%	70.3%	33.3%	94.9%	14.7%
Unemployment Rate	5.8%	5.5%	2.2%	17.4%	2.0%
Per Capita Income (thousands, 2008\$)	\$30.9	\$30.1	\$18.3	\$56.4	\$6.1

A Simple Test of Tax and Expenditure Limitations: The “Dummy” TEL Test

Equations (1) and (2) depict the simplest empirical models to test the impact of TELs on spending.

My sample includes observations from 49 states up to 30 years.⁹ The subscript x denotes an observation from a particular state and the subscript t denotes an observation from a particular year. These tests use a “dummy variable” equal to 1 if state x had a TEL in year t and 0 otherwise. Following Crain (2003) and Shadbegian (1996), I interacted this term with per capita income to assess the differential impact that TELs have in high- and low-income states.

⁹ Due to missing years in the state and local expenditure data, the second regression includes fewer observations.

$$(State Expenditure Share)_{xt} \quad (1)$$

$$\begin{aligned}
&= \beta_0 + \beta_1(\text{Dummy TEL})_{xt} + \beta_2(\text{Dummy TEL})_{xt}(\text{Per Capita Income})_{xt} \\
&\quad + \beta_3 \ln(\text{Populaion})_{xt} + \beta_4(\text{Percent 18 to 64})_{xt} + \beta_5(\text{Percent Urban})_{xt} \\
&\quad + \beta_6(\text{Unemployment Rate})_{xt} + \beta_7(\text{Per Capita Income})_{xt} + \varphi_x + \tau_t + \varepsilon_{xt}
\end{aligned}$$

$$(State and Local Expenditure Share)_{xt} \quad (2)$$

$$\begin{aligned}
&= \beta_0 + \beta_1(\text{Dummy TEL})_{xt} + \beta_2(\text{Dummy TEL})_{xt}(\text{Per Capita Income})_{xt} \\
&\quad + \beta_3 \ln(\text{Populaion})_{xt} + \beta_4(\text{Percent 18 to 64})_{xt} + \beta_5(\text{Percent Urban})_{xt} \\
&\quad + \beta_6(\text{Unemployment Rate})_{xt} + \beta_7(\text{Per Capita Income})_{xt} + \varphi_x + \tau_t + \varepsilon_{xt}
\end{aligned}$$

I also included a set of control variables, taken from the standard literature on state spending.¹⁰ For each state in each year, I included the natural logarithm of the population, the share of the population aged 18 to 64, the share of the population living in an urban setting, the unemployment rate, and the real per capita income level (measured in 2008 dollars). The inclusion of these control variables was meant to capture variation in state spending that may be unrelated to the presence of TELs. By including the population and the share of the population in an urban setting, I effectively controlled for economies of scale in the provision of government services. Because younger residents and older residents tend to generate the most demand for public services, the share of the population aged 18 to 64 accounts for this factor. The unemployment rate is a proxy for potential claims on unemployment insurance and other state welfare programs, so its inclusion controlled for these demands. Lastly, by including real per-capita income, I accounted for whatever demand for public services results from higher income.

¹⁰ See, for example, Crain (2003); Crain and Crain (1998); Bohn and Inman (1996); Matsusaka and Gilligan (1995); Poterba (1994); and Alt and Lowry (1994).

φ_x represents a set of state dummy variables, one for each state in the sample, while τ_t represents a set of dummy variables for each year in the sample. Lastly, ε_{xt} is a random disturbance term. The results of these tests are reported in table 3.

Table 3. A Simple Test of the Effect of TELs

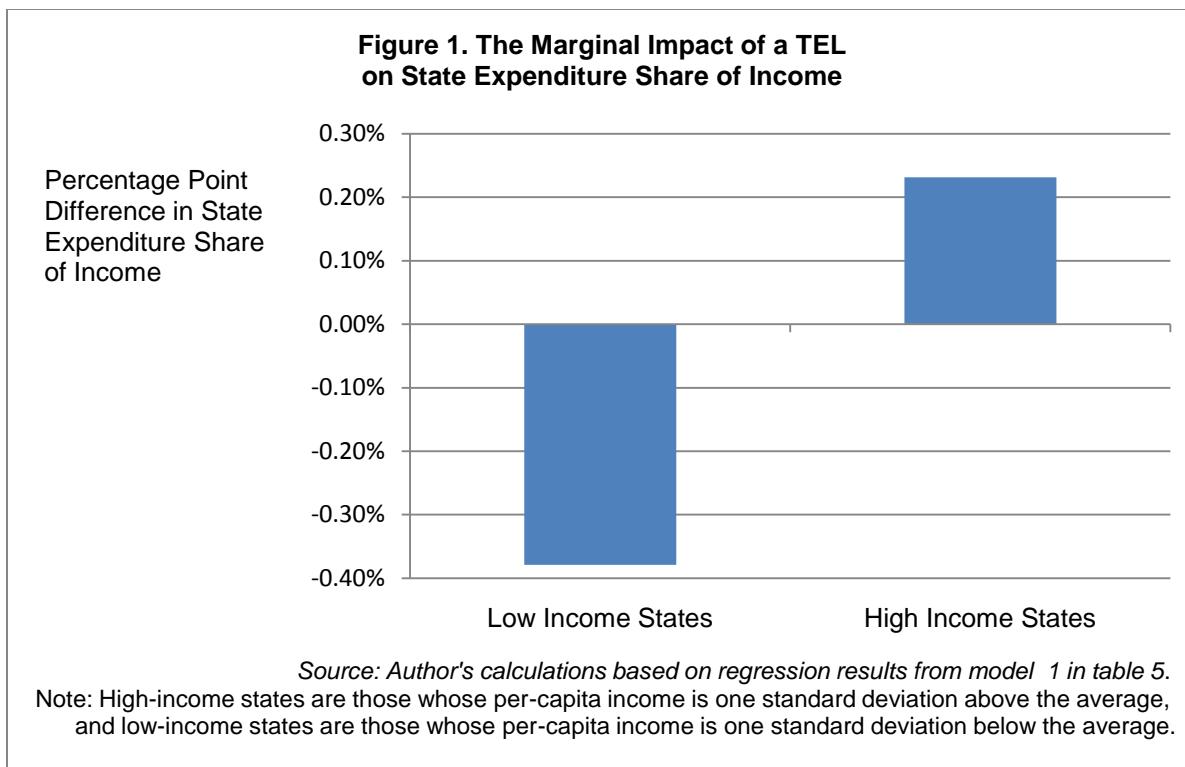
Independent Variables	Dependent Variable: State Expenditures as a Share of Income	Dependent Variable: State and Local Expenditures as a Share of Income
	Model 1	Model 2
Variables of Interest		
Dummy TEL	-0.016 (0.008)**	-0.018 (0.009)*
Interaction: (Dummy TEL)	0.0005	0.0005
X (Per Capita Income)	(0.0003)*	(0.0003)
Control Variables		
In (Population)	-0.024 (0.010)**	-0.024 (0.013)*
Percent 18 to 64	0.046 (0.066)	-0.095 (0.104)
Percent Urban	-0.037 (0.036)	-0.043 (0.051)
Unemployment Rate	0.168 (0.050)***	0.290 (0.074)***
Per Capita Income, thousands	-0.003 (0.0006)***	-0.003 (0.0008)***
Year Dummy Variables	Yes	Yes
State Dummy Variables	Yes	Yes
Total Panel Observations	1470	1372
Adjusted R-Squared	0.92	0.87

Notes:

Robust standard errors account for clustering at the state level and are reported in parentheses.

* Indicates significance at the 10 percent level for a two-tailed test. ** Indicates significance at the 5 percent level for a two-tailed test. ***Indicates significance at the 1 percent level for a two-tailed test.

In the first model, the estimated coefficient on the dummy TEL obtains statistical significant at the 5 percent level, while the coefficient on the interaction term obtains significance at the 10 percent level.¹¹ This suggests that there is some reason to suspect that TELs impact state spending. The negative estimated coefficient on the Dummy TEL in conjunction with the positive coefficient on the interaction term suggest that in low-income states, TELs are associated with less spending, while in high-income states, TELs are actually associated with more spending. Figure 1 depicts the respective marginal effects of a TEL in a low- and high-income state.¹²



Note, first, that the effects are relatively modest. In the best case-scenario, a TEL in a low-income state (which I define as a state with per capita income one standard deviation below average) is associated with a state spending share of income that is about 4/10 of one percentage point lower than

¹¹ When the interaction term is not included, the dummy TEL variable fails to obtain statistical significance.

¹² The marginal effect is given by: $\hat{\beta}_1 + \hat{\beta}_2 \cdot (\text{Per Capita Income})$ where $\hat{\beta}_1$ and $\hat{\beta}_2$ are estimates of β_1 and β_2 , respectively.

average. The average state share of spending is about 13.4 percent. So, in low-income states, TELs seem to decrease the state spending share of income by less than 3 percent ($=0.37/13.4$).

Now, however, consider the impact of a TEL in a high-income state. In these states, TELs are associated with a state spending share of income that is a little more than 2/10 of one percentage point *greater* than average.

The second model estimated the effect of TELs on state and local spending, instead of state-only spending. In this model, the estimated coefficient on the Dummy TEL obtains statistical significance at the 10 percent level, while the estimated coefficient on the interaction term fails to obtain statistical significance at all. On the one hand, this suggests that in terms of combined state and local spending, TELs may not have a differential impact in low and high-income states. On the other hand, the marginal statistical significance on the dummy coefficient suggests that there is relatively weak evidence that TELs impact combined state and local spending at all.

Getting into the Details: Testing the Stringency of TELs

As I noted in section II above, no two TELs are exactly alike. It is quite possible, then, that a simple dummy variable test like the one reported in the last section fails to capture the rich variation in TELs and, with it, the differential impact that these various types of TELs may have on spending. Each TEL may or may not have a number of additional characteristics (outlined in table A1 in the appendix) that impact its effectiveness. Theoretically, a number of factors seem likely to make TELs more effective in limiting spending:

- **Adopted by initiative, referendum, or constitutional convention:** This is important because if a TEL is the result of a referendum or a constitutional convention, rather than the result of ordinary legislation, then it represents an extra-legislative constraint on policy makers.¹³
- **Constitutional:** TELs can be codified in state constitutions or in state statutes. The latter can be easily changed or overridden by subsequent simple-majority vote legislation. But constitutional TELs are not easily undone.
- **Applies to spending:** A TEL can limit either the spending or the revenue side of a state's budget. States may respond to revenue-based TELs by resorting to fees or borrowing, but a spending-based TEL is more difficult to evade.
- **Requires a supermajority or public vote for override:** All TELs contain provisions that permit them to be overridden or suspended. TELs that require either a supermajority legislative vote or a vote of the people to do this are more stringent than TELs that do not. In fact, one might say that TELs without this characteristic are not limiting at all.
- **Automatically refunds surpluses:** TELs often stipulate what is to be done with government revenue that is in excess of the allowable amount. Sometimes it is placed in a rainy day fund. Sometimes it is returned to the voters. TELs that immediately refund surpluses to voters are more stringent because they make it difficult for governments to use the excess funds and because they give taxpayers an incentive to support the TEL.
- **Prohibits unfunded mandates on local governments:** States may react to TELs by forcing lower levels of government to carry out certain governmental functions. Some TELs attempt to limit this by either automatically adjusting the TEL when functions are devolved to lower levels of government or by forcing the state to fund any activity it mandates lower levels perform. These provisions make it more difficult for states to evade the intent of a TEL.

¹³ See Buchanan and Tullock (1965) or Buchanan and Brennan (1985) on constitutional rules that restrain in-period political outcomes.

These characteristics are not mutually exclusive and are often highly correlated (for example, the correlation coefficient between those TELs that limit spending and those that were adopted by referendum is 0.56). I, therefore, cannot test all of these characteristics in one regression using separate indicator variables. Instead, I developed an “index variable.” The index was created by assigning one point for each of the above-listed characteristics thought to make a TEL more stringent. Like the other variables in this study, it is described above in table 1 and its summary statistics are reported in table 2.

In testing the stringency index, I employed a model similar to that of models 1 and 2. As I did with the dummy TEL indicator, I interacted the stringency index with real per-capita income. This allowed me to capture the differential impact that more-stringent TELs have in high and low-income states. As with models 1 and 2, I employed state and year fixed effects and a standard set of control variables. Now, for brevity, I allow the matrix \mathbf{X} to stand in for the control variables. The models are given by equations 3 and 4:

$$\begin{aligned} & (\text{State Expenditure Share})_{xt} \quad (3) \\ & = \beta_0 + \beta_1(\text{TEL Index})_{xt} + \beta_2(\text{TEL Index})_{xt}(\text{Per Capita Income})_{xt} + \Phi\mathbf{X} + \varphi_x + \tau_t \\ & \quad + \varepsilon_{xt} \end{aligned}$$

$$\begin{aligned} & (\text{State and Local Expenditure Share})_{xt} \quad (4) \\ & = \beta_0 + \beta_1(\text{TEL Index})_{xt} + \beta_2(\text{TEL Index})_{xt}(\text{Per Capita Income})_{xt} + \Phi\mathbf{X} + \varphi_x + \tau_t \\ & \quad + \varepsilon_{xt} \end{aligned}$$

The results of these tests are reported in table 4.

Table 4. Testing the Stringency of TELs

Independent Variables	Dependent Variable: State Expenditures as a Share of Income	Dependent Variable: State and Local Expenditures as a Share of Income
	Model 3	Model 4
Variables of Interest		
TEL Index	-0.004 (0.002)**	-0.003 (0.002)
Interaction: (TEL Index) X (Per Capita Income)	0.0001 (0.00006)*	0.0001 (0.00008)
Control Variables		
All Control Variables From Model 1	Yes	Yes
Year Dummy Variables	Yes	Yes
State Dummy Variables	Yes	Yes
Total Panel Observations	1470	1372
Adjusted R-Squared	0.92	0.86

Notes:

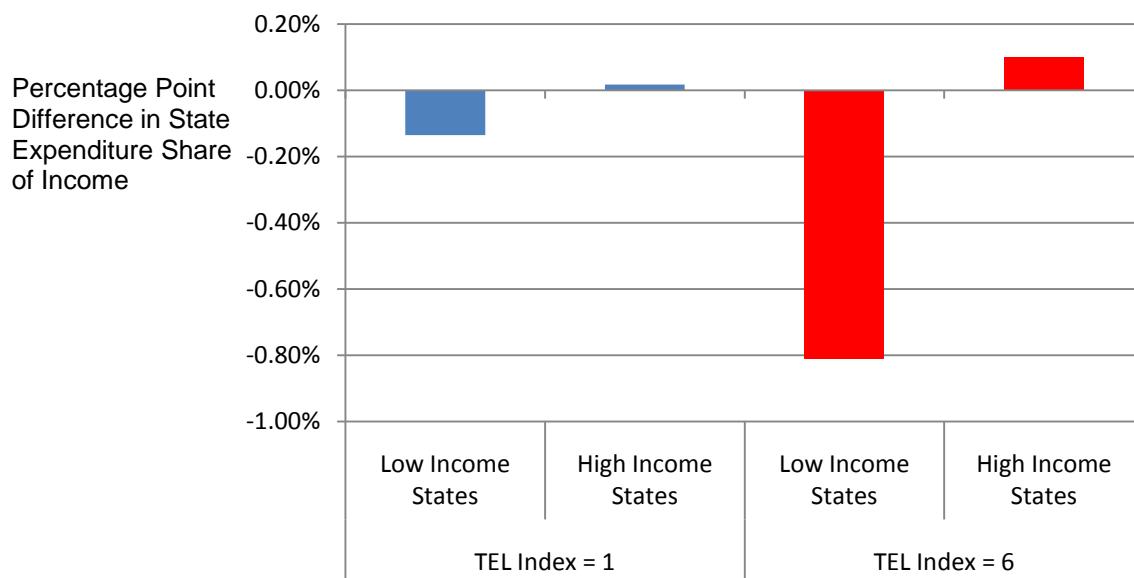
Robust standard errors account for clustering at the state level and are reported in parentheses.

* Indicates significance at the 10 percent level for a two-tailed test. ** Indicates significance at the 5 percent level for a two-tailed test.

In the regression model on state-only spending, the estimated coefficients on the TEL Index obtained statistical significance at the 5 percent level, while that of the interaction term obtained significance at the 10 percent level. In the regression model on state and local spending, neither coefficient obtained statistical significance. Figure 2 depicts the marginal impact of the TEL stringency index. It shows the different impact that strong and weak TELs have in low and high-income states. Weak TELs—those with an Index that takes a value of 1—tend not to impact state spending very much in either low or high-income states. At best, they decrease spending by about 1/10 of one percentage point in low-income states. At worst, they increase spending by less than 1/100 of one percentage point in high-income states.

The most-stringent TELs, on the other hand, do have an appreciable impact on state spending. In low-income states, those TELs with an index value of 6 (i.e., those that have all of the 6 characteristics listed above) are associated with a spending share of income that is about 8/10 of one percentage point lower than would otherwise be the case. This is 6 percent less than the average state spending share of income. In high-income states, these more-stringent TELs are associated with spending shares that are about 1/10 of one percentage point greater.

Figure 2. The Marginal Impact of TEL Stringency on State Spending



Source: Author's calculations based on regression results from model 3 in table 4.
Note: High-income states are those whose per capita income is one standard deviation above the average, and low-income states are those whose per capita income is one standard deviation below the average.

If more-stringent TELs seem to be more impactful, which of the six characteristics listed above seem to matter the most? To answer this question, I ran separate regressions, each with a dummy variable indicating one of the 6 characteristics listed above. Each regression also included an interaction term

that was the product of the characteristic dummy and real per capita income. I ran these tests for both state-only and state and local spending as a share of income.¹⁴

In terms of their impact on state spending as a share of income, all factors obtained the predicted sign, but only four were statistically significant in some way. Three factors obtained statistical significance at the 10 percent level. These were constitutional TELs, TELs that limit spending, and TELs that automatically and immediately refund surpluses. An additional characteristic obtained statistical significance at the 1 percent level: TELs that require a supermajority or public vote to be overridden.

In terms of their impact on state and local combined spending, all factors showed the predicted sign but only one factor obtained statistical significance. This, again, was the supermajority or public vote requirement for overriding the TEL. As in the state-only tests, this factor obtained statistical significance at the 1 percent level. These results suggest that among all of the characteristics listed above, a supermajority vote or a public vote to override the TEL stands out. This fits with the theoretical prediction. And, indeed, some researchers have coded states as having “advisory” limits if they lack a supermajority or public vote requirement (see, e.g., Skidmore, 1999).

In the next section, I examine the different impact of different TEL formulas. Given the importance of the supermajority or public vote override characteristic, I coded states as having TELs only if they had a supermajority vote requirement (see table 1, above, for a description of the variables).

¹⁴ For the sake of brevity, I do not report these tests. I am happy to share the results with anyone who is curious, however.

More Details: Testing Different TEL Formulas

As I noted in section II, above, one of the most important distinguishing characteristics of a TEL is the formula by which it limits the budget. In this section, I describe a number of tests that were designed to assess the impact that different TEL formulas may have on spending.

The models are given by equations 5 and 6, below. As before, I employed a standard set of control variables as well as state and year fixed effects. I tested four different varieties of TELs:

1. Those whose formulas permit budgets to grow no faster than inflation plus population growth;
2. Those whose formulas permit budgets to grow no faster than state income growth;
3. Those whose formulas limit the overall budget size to some share of income in the state; and
4. An “other” category that captures all other varieties of TELs. These are often a combination of inflation or some fixed number; see appendix table A2 for details.

As with the previous models, I also included interaction terms to account for the different impact that TELs may have in high- and low-income states. Recall that researchers have used these terms because TELs often incorporate income in their formulas. Now that I am using separate variables to account for the different types of TELs, however, I only interact per capita income with those TEL types that include income in their formula (that is, with TEL types 2 and 3 above).¹⁵ Descriptions and summary statistics for these variables are reported tables 1 and 2, respectively. The results of these tests are reported in table 5, below.

¹⁵ I also ran regressions with interaction terms on all TEL types. As expected, the interaction terms on TEL types 1 and 4—those without income in their formulas—failed to obtain statistical significance.

$$(\text{State Expenditure Share})_{xt} \quad (5)$$

$$\begin{aligned}
&= \beta_0 + \beta_1(\text{Inflation Plus Pop TEL})_{xt} + \beta_2(\text{Income Growth TEL}) \\
&\quad + \beta_3(\text{Income Growth TEL})_{xt}(\text{Per Capita Income})_{xt} + \beta_4(\text{Income Share TEL})_{xt} \\
&\quad + \beta_5(\text{Income Share TEL})_{xt}(\text{Per Capita Income})_{xt} + \beta_6(\text{Other TEL})_{xt} + \Phi \mathbf{X} + \varphi_x + \tau_t \\
&\quad + \varepsilon_{xt}
\end{aligned}$$

$$(\text{State and Local Expenditure Share})_{xt} \quad (6)$$

$$\begin{aligned}
&= \beta_0 + \beta_1(\text{Inflation Plus Pop TEL})_{xt} + \beta_2(\text{Income Growth TEL}) \\
&\quad + \beta_3(\text{Income Growth TEL})_{xt}(\text{Per Capita Income})_{xt} + \beta_4(\text{Income Share TEL})_{xt} \\
&\quad + \beta_5(\text{Income Share TEL})_{xt}(\text{Per Capita Income})_{xt} + \beta_6(\text{Other TEL})_{xt} + \Phi \mathbf{X} + \varphi_x + \tau_t \\
&\quad + \varepsilon_{xt}
\end{aligned}$$

Those TELs that restrict budget growth to inflation plus population growth seem not to have a statistically significant impact on state expenditures as a share of income. In model 5, the coefficient on this term failed to obtain statistical significance. This is somewhat surprising given the fact that these TELs are widely regarded as the most restrictive. There is some evidence that this variety of TEL does, however, seem to impact state and local expenditures as a share of income. In model 6, the coefficient on this term obtained significance at the 5 percent level.

Those TELs that limit budget growth to state income growth seem to have a statistically significant impact on both state spending and state and local spending. Their coefficients obtained statistical significance at the 5 percent level in the state-only tests and at the 1 percent level in state and local spending tests. TELs that limit budgets to some share of income had no statistically significant impact on either state-only spending or on combined state and local spending. Lastly, those TELs that are based on other factors seem to have a statistical significant impact on state-only spending (at the 1 percent level), but no statistically significant impact on state and local spending.

Table 5. Testing Different TEL Formulas

Independent Variables	Dependent Variable: State Expenditures as a Share of Income	Dependent Variable: State and Local Expenditures as a Share of Income
	Model 5	Model 6
Variables of Interest		
Inflation + Pop Basis	-0.004 (0.002)	-0.006 (0.003)**
Income Growth Basis	-0.020 (0.008)**	-0.038 (0.011)***
Interaction Term: (Income Growth Basis) X (Per Capita Income)	0.001 (0.0003)**	0.001 (0.0004)***
Income Share Basis	-0.016 (0.012)	-0.004 (0.017)
Interaction Term: (Income Share Basis) X (Per Capita Income)	0.001 (0.0004)	0.0003 (0.0006)
Other Basis	0.014 (0.005)***	0.0071 (0.007)
Control Variables		
All Control Variables from Model 1	Yes	Yes
Year Dummy Variables	Yes	Yes
State Dummy Variables	Yes	Yes
Total Panel Observations	1470	1372
Adjusted R-Squared	0.92	0.87

Notes:

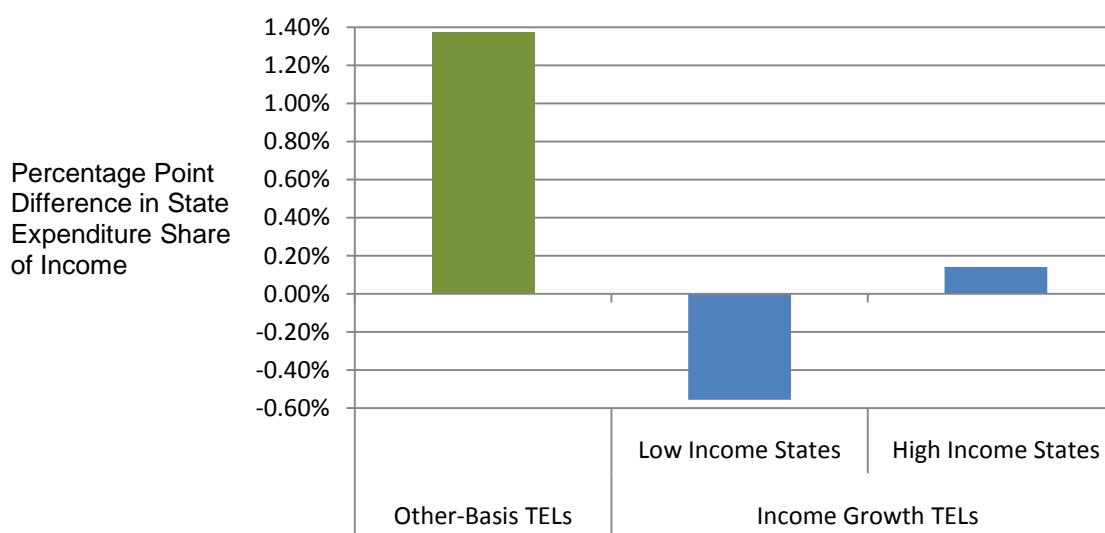
Robust standard errors account for clustering at the state level and are reported in parentheses. ** Indicates significance at the 5 percent level for a two-tailed test. ***Indicates significance at the 1 percent level for a two-tailed test.

Figure 2 displays the marginal impact of those TEL varieties that have a statistically significant impact on state-only spending. In the case of income-growth-based TELs, the impact on state spending depends on whether the state is a high or low-income state. In low-income states, income-growth-based TELs are associated with an expenditure share of income that is nearly 6/10 of a percentage point lower relative to other states. Since the average state's expenditure share of income is about 13.4 percent, this represents a 4 percent difference compared to the average. In high-income states, however, these types

of TELs are associated with spending that is more than 1/10 of a percentage point higher relative to other states (about 1 percent higher compared to the average state spending share).

Those TELs that limit budgets by some other basis have a comparatively worse record. They are associated with state spending shares that are nearly 1.4 percentage points higher than other states. Compared with a typical spending share, this is a more than 10 percent difference. Unlike the income-based TELs, the impact of the other-based TELs does not depend on whether the state is high or low income.

Figure 2. The Marginal Impact of Different TELs on State Expenditure Share of Income



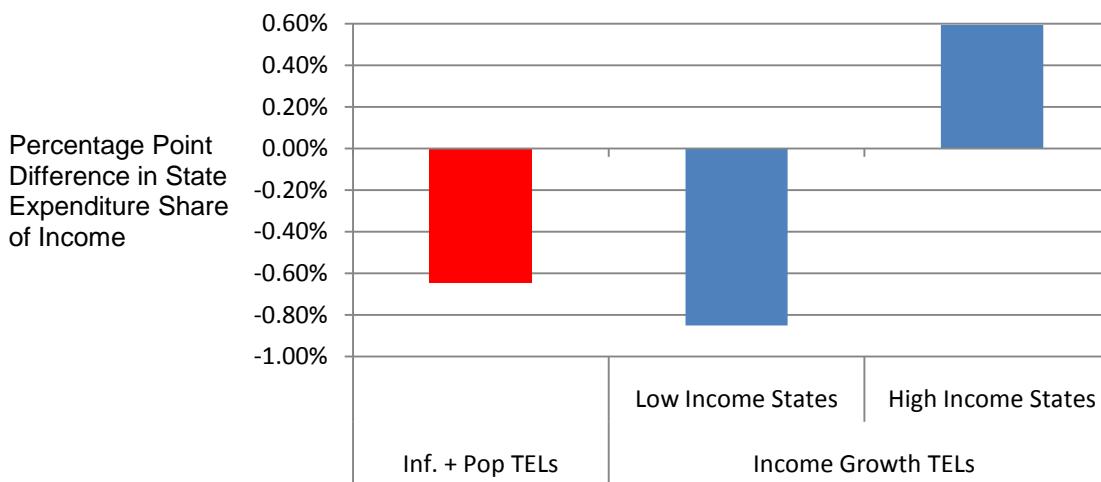
Source: Author's calculations based on regression results from model 5 in table 5.
Note: High income-states are those whose per capita income is one standard deviation above the average, and low-income states are those whose per capita income is one standard deviation below the average.

Figure 3 depicts the marginal impact of those types of TELs that have a statistically significant effect on combined state and local spending as a share of income. Those TELs that limit budget growth to the sum of inflation plus population growth are associated with state and local spending shares that are

about 6/10 of one percentage point lower (this is a 3 percent difference relative to the typical state and local spending share). This impact holds in both high- and low-income states.

Income-growth based TELs, however, have a different impact depending on whether the state is a low-income or a high-income state. In low-income states, these TELs are associated with state and local spending shares that are more than 8/10 of one percentage point lower (this is a 4 percent difference relative to the typical state and local spending share). In high-income states, however, they are associated with state and local spending shares that are nearly 6/10 of one percentage point higher (a difference of nearly 3 percent relative to the typical state and local spending share).

Figure 3. The Marginal Impact of Different TELs on State and Local Expenditure Share of Income



Source: Author's calculations based on regression results from model 6 in table 5.
Note: High income-states are those whose per capita income is one standard deviation above the average, and low-income states are those whose per capita income is one standard deviation below the average.

III. Discussion and Conclusion

Over the last half-century, real state and local government spending has grown at a remarkable clip, outpacing real growth in the private sector by 34 percent.¹⁶ According to the Government Accountability Office, absent policy changes, state and local spending will continue to grow at an unsustainable pace for at least the next 50 years. As a consequence, the “fiscal position [of state and local governments] will steadily decline through 2060.”¹⁷

As policy makers look for tools to arrest the growth of government budgets, TELs are likely to be part of the discussion. In terms of limiting budgets, however, the TEL record is somewhat mixed. The most common variety of TEL—that which limits state budget growth to growth in state income—is associated with smaller budgets in low-income states, but is actually associated with *larger* budgets in high-income states. It may be that this variety of TEL serves as an excuse for policy makers to spend up to the limit, rather than as a binding constraint on spending. Another common variety of TEL limits budgets to some share of income. These TELs, however, have no statistically significant impact on either state-only spending or state-and-local spending as a share of income. It may be that policy makers are careful to set these limits so high that they are not binding. Lastly, TELs that are based on some other factors such as inflation or a fixed number are associated with significantly more state spending as a share of income. Here, again, it is plausible that policy makers view these limits as an excuse to spend up to the limit rather than as a constraint.

Those TELs that limit budgets to inflation plus population growth seem to limit combined state and local spending. In states with this variety of TEL, state and local spending as a share of state income is about 6/10 of a percentage point less than in other states (this is a 3-percent difference relative to the

¹⁶ Author’s calculations, based on data from the National Economic Accounts. See, also, Mitchell, 2010.

¹⁷ See Government Accountability Office, 2010.

average state and local spending share). Unlike income growth-based TELs, this variety of TEL seems to have an impact in both high- and low-income states. This variety of TEL is often favored by advocates of limited government because it is particularly restrictive (the sum of inflation and population growth is typically less than income growth). But this research suggests another reason for these advocates to favor the inflation-plus-population TEL: it limits spending in both low and high-income states.

In addition to the formulas on which they are based, there are other characteristics that can make TELs more effective. These include extra-legislative adoption, constitutional codification, a limit that is based on spending rather than on revenue, a supermajority or public vote requirement for overrides, a provision that automatically and immediately refunds surpluses in excess of the limit, and a prohibition on unfunded mandates to the local levels. I found that those TELs with more of these characteristics tended to have more of an impact on spending. Separate tests of each characteristic suggest that a supermajority or public vote requirement is particularly important.

Given the continued interest in limiting the growth of state and local budgets, policy makers would do well to remember that TELs are not the only arrow in their quiver. Strict balanced-budget requirements are another option (while all states but Vermont have some sort of balanced budget requirement, some are more strict than others). Mark Crain (2003) and David Primo (2007) have both found that states with stricter balanced budget requirements tend to spend less than other states. The impact is at least as large as the best-case impact of a TEL. Similarly, Bohn and Inman (1996) have shown that when states with balanced budget requirements encounter budget shortfalls, they tend to react by cutting spending rather than by raising taxes.

Another option is a supermajority requirement for all tax increases. Crain and Miller (1990), Knight (2000), and Crain (2003) have all found that these requirements are associated with smaller budgets.

Knight found the effect to be quite large; he showed that these requirements decrease taxation levels by about 8 percent relative to the mean state.

A special variety of veto power known as the item-reduction veto has also been shown to limit state budgets. This kind of veto gives the governor an option to write in a lower spending amount for a particular item. In contrast with other veto varieties, these have been shown to have a statistically significant impact on state spending.¹⁸ The impact is quite significant. Crain (2003) found that states with this power spend about 14 percent less per capita than others.

¹⁸ See Crain and Miller (1990) and Crain (2003).

Bibliography

- Abrams, Burton, and William Dougan. "The Effects of Constitutional Restraints on Government Spending." *Public Choice* 49 (1986): 101–16.
- Alt, James, and Robert Lowry. "Divided Government, Fiscal Institutions, and Budget Deficits: Evidence from the States." *The American Political Science Review* 88, no. 4 (1994): 811–828.
- Bails, Dale. "The Effectiveness of Tax-Expenditure Limitations: A Re-evaluation." *American Journal of Economics and Sociology* 49, no. 2 (1990): 223–238.
- Bails, Dale, and Margie Tieslau. "The Impact of Fiscal Constitutions on State and Local Expenditures." *Cato Journal* 20, no. 2 (2000): 255–277.
- Bohn, Henning, and Robert Inman. "Balanced Budget Rules and Public Deficits: Evidence from the U.S. States." *Carnegie-Rochester Conference Series on Public Policy* 45 (1996): 13–76.
- Buchanan, James, and Geoffrey Brennan. *The Reason of Rules: Constitutional Political Economy*. Indianapolis, IN: Liberty Fund, 1985.
- Buchanan, James, and Gordon Tullock. *The Calculus of Consent: Logical Foundation of Constitutional Democracy*. Ann Arbor: The University of Michigan, 1965.
- Bureau of Economic Analysis. *National Economic Accounts*. 2010. <http://www.bea.gov/national/index.htm#gdp> (accessed July 10, 2010).
- Crain, Mark. *Volatile States: Institutions, Policy, and the Performance of American State Economies*. Ann Arbor, MI: University of Michigan Press, 2003.
- Crain, Mark, and James C. Miller III. "Budget Process and Spending Growth." *William and Mary Law Review* 31, no. 4 (1990): 1021–46.
- Crain, Mark, and Nicole Crain. "Fiscal Consequences of Budget Baselines." *Journal of Public Economics* 67, no. 3 (1998): 421–36.
- Elder, Harold. "Exploring the Tax Revolt: An Analysis of the Effectiveness of State Tax and Expenditure Limitation Laws." *Public Finance Quarterly* 20, no. 1 (1992): 47–63.
- Government Accountability Office. *State and Local Governments: Fiscal Pressures Could Have Implications for future Delivery of Intergovernmental Programs*. Washington, D.C.: U.S. Government Printing Office, 2010.
- Knight, Brian. "Supermajority Voting Requirements for Tax Increases: Evidence from the States." *Journal of Public Economics* 76, no. 1 (2000).

- Kousser, Thad, Matthew McCubbins, and Ellen Moule. "For Whom the TEL Tolls: Can State Tax and Expenditure Limits Effectively Reduce Spending?" *State Politics and Policy Quarterly* 8 (2008): 331–361.
- Matsusaka, John, and Thomas Gilligan. "Deviations from Constituent Interests: The Role of Legislative Structure and Political Parties in the States." *Economic Inquiry* 33 (1995): 383–401.
- Mitchell, Matthew. "State Spending Restraint: An Analysis of the Path Not Taken." *Mercatus Center at George Mason University Working Paper*, no. 48 (August 2010).
- New, Michael. "Limiting Government Through Direct Democracy: The Case of State Tax and Expenditure Limitations." *Policy Analysis* 420 (2001).
- New, Michael. "Proposition 13 and State Budget Limitations: Past Successes and Future Options." *Cato Institute Briefing Papers* 83 (2003).
- Poterba, James. "State Responses to Fiscal Crises: The Effects of Budgetary Institutions and Politics." *The Journal of Political Economy* 102 (1994): 799–821.
- Primo, David. *Rules and Restraint: Government Spending and the Design of Institutions*. Chicago, IL: University of Chicago Press, 2007.
- Rueben, Kim. "Tax Limitation and Government Growth: The Effect of State Tax and Expenditure Limits on State and Local Government." *Mimeo, Department of Economics, MIT*, 1995.
- Shadbegian, Ronald. "Do Tax and Expenditure Limitations Affect the Size and Growth of State Government?" *Contemporary Economic Policy* 14 (1996): 22–35.

Appendix

Table A1. Characteristics of TELs

State	Time	Adoption Method	Con. or Statute	Limits Spending or Revenue	Supermaj. or Public Vote is Required to Override	Immediate Refunds of Surpluses	No Unfunded Mandate
Alabama	1970–present	-	-	-	-	-	-
Alaska	1970–1981	-	-	-	-	-	-
Alaska	1982–present	Referenda	Constitution	Spending	Yes	No	No
Arizona	1970–1977	-	-	-	-	-	-
Arizona	1978–present	Referenda	Constitution	Spending	Yes	No	Yes
Arkansas	1970–present	-	-	-	-	-	-
California	1970–1978	-	-	-	-	-	-
California	1979–1988	Initiative	Constitution	Revenue	Yes	Yes	Yes
California	1989–present	Initiative	Constitution	Revenue	Yes	Yes	Yes
Colorado	1970–1977	-	-	-	-	-	-
Colorado	1978–1990	Legislature	Statute	Spending	No	No	No
Colorado	1991	Legislature	Statute	Spending	Yes	No	No
Colorado	1992–2005	Initiative	Constitution	Revenue and Spending	Yes	Yes	Yes
Colorado	2006–2011	Initiative	-	-	-	-	-
Connecticut	1970–1990	-	-	-	-	-	-
Connecticut	1991–present	Legislature	Statute	Spending	Yes	No	No
Delaware	1970–present	-	-	-	-	-	-
Florida	1970–1993	-	-	-	-	-	-
Florida	1994–present	Referenda	Constitution	Revenue	Yes	No	No
Georgia	1970–present	-	-	-	-	-	-
Hawaii	1970–1977	-	-	-	-	-	-

	1978–present	Con. Convention	Constitution	Spending	Yes	No	Yes
Hawaii	1970–1979	-	-	-	-	-	-
Idaho	1980–present	Legislature	Statute	Spending	Yes	No	Yes
Illinois	1970–present	-	-	-	-	-	-
Indiana	1970–2001	-	-	-	-	-	-
Indiana	2002–present	Legislature	Statute	Spending	No	No	Yes
Iowa	1970–1991	-	-	-	-	-	-
Iowa	1992–present	Legislature	Statute	-	-	-	-
Kansas	1970–present	-	-	-	-	-	-
Kentucky	1970–present	-	-	-	-	-	-
Louisiana	1970–1979	-	-	-	-	-	-
Louisiana	1980–present	Legislature	Statute	Revenue	No	No	No
Louisiana	1993–present	Referenda	Constitution	Revenue and Spending	Yes	No	No
Maine	1970–2004	-	-	-	-	-	-
Maine	2005–present	Legislature	Statute	Spending	No	No	No
Maryland	1970–present	-	-	-	-	-	-
Massachusetts	1970–1985	-	-	-	-	-	-
Massachusetts	1986–2001	Initiative	Statute	Revenue	No	No	No
Massachusetts	2002–present	Legislature	Statute	Revenue	No	No	No
Michigan	1970–1977	-	-	-	-	-	-
Michigan	1978–present	Initiative	Constitution	Revenue	Yes	Yes	Yes
Minnesota	1970–present	-	-	-	-	-	-
Mississippi	1970–1982	-	-	-	-	-	-
Mississippi	1983–1992	Legislature	Statute	-	-	-	-
Mississippi	1993–present	Legislature	Statute	Spending	-	-	-
Missouri	1970–1980	-	-	-	-	-	-
Missouri	1981–present	Initiative	Constitution	Revenue	Yes	Yes	Yes

Montana	1970–1981	-	-	-	-	-	-
Montana	1982–2005	Legislature	Statute	Spending	Yes	No	
Montana	2006–present	-	-	-	-	-	-
Nebraska	1970–present	-	-	-	-	-	-
Nevada	1970–1978	-	-	-	-	-	-
Nevada	1979–present	Legislature	Statute	Proposed Spending	-	-	-
New Hampshire	1970–present	-	-	-	-	-	-
New Jersey	1970–1975	-	-	-	-	-	-
New Jersey	1976–1983	Legislature	Statute	Spending	Yes	No	?
New Jersey	1984–1990	-	-	-	-	-	-
New Jersey	1991–present	Legislature	Statute	Spending	No	No	Yes
New Mexico	1970–present	-	-	-	-	-	-
New York	1970–present	-	-	-	-	-	-
North Carolina	1970–1991	-	-	-	-	-	-
North Carolina	1992–present	Legislature	Statute	Spending	No	No	
North Dakota	1970–present	-	-	-	-	-	-
Ohio	1970–2005	-	-	-	-	-	-
Ohio	2006–present	Legislature	Statute	Spending	Yes	No	?
Oklahoma	1970–1984	-	-	-	-	-	-
Oklahoma	1985–present	Referenda	Constitution	Spending	No	No	No
Oregon	1970–1979	-	-	-	-	-	-
Oregon	1980–2000	Legislature	Statute	Spending	No	Yes	Yes
Oregon	2001–present	Initiative	Constitution	Revenue and Spending	No	Yes	Yes
Pennsylvania	1970–present	-	-	-	-	-	-
Rhode Island	1970–1976	-	-	-	-	-	-
Rhode Island	1977–1991	-	-	-	-	-	-
Rhode Island	1992–present	Referenda	Constitution	-	-	-	-

South Carolina	1970–1979	-	-	-	-	-	-	-
South Carolina	1980–present	Referenda	Constitution	Spending	Yes	No	No	No
South Dakota	1970–present	-	-	-	-	-	-	-
Tennessee	1970–1977	-	-	-	-	-	-	-
Tennessee	1978–present	Con. Convention	Constitution	Spending	No	No	No	Yes
Texas	1970–1977	-	-	-	-	-	-	-
Texas	1978–present	Referenda	Constitution	Spending	No	No	No	No
Utah	1970–1988	-	-	-	-	-	-	-
Utah	1989–present	Legislature	Statute	Spending	Yes	No	No	Yes
Vermont	1970–present	-	-	-	-	-	-	-
Virginia	1970–present	-	-	-	-	-	-	-
Washington	1970–1979	-	-	-	-	-	-	-
Washington	1980–1992	Legislature	Statute	Revenue	?	No	No	?
Washington	1993–present	Initiative	Statute	Spending	Yes	No	No	Yes
West Virginia	1970–present	-	-	-	-	-	-	-
Wisconsin	1970–2000	-	-	-	-	-	-	-
Wisconsin	2001–present	Legislature	Statute	Spending	No	No	No	?
Wyoming	1970–present	-	-	-	-	-	-	-

Sources: Bert Waisanen, “State Tax and Expenditure Limits—2010” (Washington, DC: *National Conference of State Legislatures*, 2010); Mandy Rafool, “State Tax and Expenditure Limits” (Washington, DC: National Conference of State Legislatures, 1996); Daniel Mullins and Bruce Wallin, “Tax and Expenditure Limitations: Introduction and Overview,” *Public Budgeting & Finance*, Winter 2004; Michael New, “Limiting Government Through Direct Democracy: The Case of State Tax and Expenditure Limitations,” *Policy Analysis*, 2001, No. 420; Michael New, “Proposition 13 and State Budget Limitations: Past Successes and Future Options,” *Cato Institute Briefing Papers*, 2003, No. 83; Mark Skidmore, “Tax and Expenditure Limitations and the Fiscal Relationships Between State and Local Governments,” *Public Choice*, 1999, Vol. 99, pp. 77–102. Question marks indicate the data is unknown and were coded as “0” in the dataset. Please contact the author with any additional information.

Table A2. Basis of Limit

State	Time	Growth in Population Plus Inflation	Growth in Income	Some Share of Total State Income	Based on Some Other Number	If "Other", what?
Alabama	1970–present	-	-	-	-	-
Alaska	1970–1981	-	-	-	-	-
Alaska	1982–present	Yes	-	-	-	-
Arizona	1970–1977	-	-	-	-	-
Arizona	1978–present	-	-	Yes	-	-
Arkansas	1970–present	-	-	-	-	-
California	1970–1978	-	-	-	-	-
California	1979–1988	Yes	-	-	-	-
California	1989–present	-	Yes	-	-	-
Colorado	1970–1977	-	-	-	-	-
Colorado	1978–1990	-	-	-	Yes	7 percent over the previous year.
Colorado	1991	-	-	Yes	-	-
Colorado	1992–2005	Yes	-	-	-	-
Colorado	2006–2011	-	-	-	-	-
Connecticut	1970–1990	-	-	-	-	-
Connecticut	1991–present	-	Yes	-	Yes	Average growth in income in 5 previous years, or last year's inflation, whichever is greater.
Delaware	1970–present	-	-	-	-	-
Florida	1970–1993	-	-	-	-	-
Florida	1994–present	-	Yes	-	-	-
Georgia	1970–present	-	-	-	-	-
Hawaii	1970–1977	-	-	-	-	-
Hawaii	1978–present	-	Yes	-	-	-
Idaho	1970–1979	-	-	-	-	-
Idaho	1980–present	-	-	Yes	-	-
Illinois	1970–present	-	-	-	-	-
Indiana	1970–2001	-	-	-	-	-
Indiana	2002–present	-	-	-	Yes	A complex formula.
Iowa	1970–1991	-	-	-	-	-
Iowa	1992–present	-	-	-	-	-
Kansas	1970–present	-	-	-	-	-
Kentucky	1970–present	-	-	-	-	-
Louisiana	1970–1979	-	-	-	-	-
Louisiana	1980–present	-	-	Yes	-	-

Louisiana	1993–present	-	Yes	Yes	-	-
Maine	1970–2004	-	-	-	-	-
Maine	2005–present	-	Yes	-	Yes	Average of 10 year personal income growth or maximum of 2.75%. Formulas are based on state's tax burden ranking.
Maryland	1970–present	-	-	-	-	-
Massachusetts	1970–1985	-	-	-	-	-
Massachusetts	1986–2001	-	Yes	-	-	-
Massachusetts	2002–present	-	Yes	-	Yes	The 2002 law added a definition for a limit that was tied to inflation in government purchases plus 2 percent.
Michigan	1970–1977	-	-	-	-	-
Michigan	1978–present	-	-	Yes	-	-
Minnesota	1970–present	-	-	-	-	-
Mississippi	1970–1982	-	-	-	-	-
Mississippi	1983–1992	-	-	-	-	-
Mississippi	1993–present	-	-	-	-	-
Missouri	1970–1980	-	-	-	-	-
Missouri	1981–present	-	-	Yes	-	-
Montana	1970–1981	-	-	-	-	-
Montana	1982–2005	-	Yes	-	-	-
Montana	2006–present	-	-	-	-	-
Nebraska	1970–present	-	-	-	-	-
Nevada	1970–1978	-	-	-	-	-
Nevada	1979–present	Yes	-	-	-	-
New Hampshire	1970–present	-	-	-	-	-
New Jersey	1970–1975	-	-	-	-	-
New Jersey	1976–1983	-	Yes	-	-	-
New Jersey	1984–1990	-	-	-	-	-
New Jersey	1991–present	-	Yes	-	-	-
New Mexico	1970–present	-	-	-	-	-
New York	1970–present	-	-	-	-	-
North Carolina	1970–1991	-	-	-	-	-
North Carolina	1992–present	-	-	Yes	-	-
North Dakota	1970–present	-	-	-	-	-

Ohio	1970–2005	-	-	-	-	-
Ohio	2006–present	Yes	-	-	Yes	3.5% if Inf + Pop < 3.5%.
Oklahoma	1970–1984	-	-	-	-	-
Oklahoma	1985–present	-	-	-	Yes	12% annual growth.
Oregon	1970–1979	-	-	-	-	-
Oregon	1980–2000	-	Yes	-	-	-
Oregon	2001–present	-	-	Yes	-	-
Pennsylvania	1970–present	-	-	-	-	-
Rhode Island	1970–1976	-	-	-	-	-
Rhode Island	1977–1991	-	-	-	-	-
Rhode Island	1992–present	-	-	-	-	-
South Carolina	1970–1979	-	-	-	-	-
South Carolina	1980–present	-	Yes	Yes	-	-
South Dakota	1970–present	-	-	-	-	-
Tennessee	1970–1977	-	-	-	-	-
Tennessee	1978–present	-	Yes	-	-	-
Texas	1970–1977	-	-	-	-	-
Texas	1978–present	-	Yes	-	-	-
Utah	1970–1988	-	-	-	-	-
Utah	1989–present	Yes	-	-	-	-
Vermont	1970–present	-	-	-	-	-
Virginia	1970–present	-	-	-	-	-
Washington	1970–1979	-	-	-	-	-
Washington	1980–1992	-	Yes	-	-	-
Washington	1993–present	Yes	-	-	-	-
West Virginia	1970–present	-	-	-	-	-
Wisconsin	1970–2000	-	-	-	-	-
Wisconsin	2001–present	-	Yes	-	-	-
Wyoming	1970–present	-	-	-	-	-

Sources: Bert Waisanen, “State Tax and Expenditure Limits--2010” (Washington, DC: *National Conference of State Legislatures*, 2010); Mandy Rafool, “State Tax and Expenditure Limits” (Washington, DC: National Conference of State Legislatures, 1996); Daniel Mullins and Bruce Wallin, “Tax and Expenditure Limitations: Introduction and Overview,” *Public Budgeting & Finance*, Winter 2004; Michael New, “Limiting Government Through Direct Democracy: The Case of State Tax and Expenditure Limitations,” *Policy Analysis*, 2001, No. 420; Michael New, “Proposition 13 and State Budget Limitations: Past Successes and Future Options,” *Cato Institute Briefing Papers*, 2003, No. 83; Mark Skidmore, “Tax and Expenditure Limitations and the Fiscal Relationships Between State and Local Governments,” *Public Choice*, 1999, Vol. 99, pp. 77–102. These sources occasionally conflict. In that case, state websites were consulted. Please contact the author if you have additional information.