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Economic Trends Across the Region

Show and TEL: Are Tax and Expenditure Limitations Effective?

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ore than half of the states in the United States are subject to some kind of limitation on their ability to raise taxes, spend money, or incur debt. Most states, at the same time, impose similar constraints on their local governments. These measures are commonly referred to as tax and expenditure limitations (TELs). TELs are part of a larger set of fiscal rules aimed at curbing the budget process with the objective of constraining decisions made by governments. Recent research has examined the effectiveness of TELs in achieving their intended objectives. This research mainly attempts to disentangle the effect of TELs on fiscal policies, policy outcomes, and economic performance. The findings are mixed: While a few studies assert that TELs do restrain governments, others hold exactly the opposite. Some research work even finds that TELs have been detrimental to the states' financial position.

Why Do TELs Exist?

State and local government budgets are constructed following certain fiscal rules defined in advance. While some of these rules define specific guidelines that should be obeyed throughout the budgeting process in order to guarantee fiscal transparency and accountability, others explicitly restrict the size of the government. Among the latter, TELs are perhaps the most widely used among state and local governments. Specifically, TELs establish a set of rules typically defined in terms of limits on the growth of tax revenues, spending, or both, with the ultimate objective of constraining the growth in the size of government. Other fiscal rules, such as balanced budget provisions and debt limits, do not necessarily intend to limit the size of government.

James Poterba of the Massachusetts Institute of Technology argues that the role of TELs and fiscal rules in general can be characterized by two contrasting views: the institutional irrelevance view and the public choice view. The institutional irrelevance view claims that budgetary institutions simply reflect voters' preferences and do not directly affect fiscal policy outcomes. States politically dominated by electorates manifestly opposed to a strong government presence in the economy would tend to limit government revenue and expenditure regardless of the existence of TELs, so in this sense the rules will necessarily be nonbinding and simply viewed, in Poterba's words, as "veils, through which voters and elected officials see, and which have no impact on ultimate policy outcomes."

The public choice view, on the other hand, supports the idea that fiscal rules can constrain fiscal policy outcomes. This view implies that politicians and governments, driven by self-interest motives, choose policies biased toward higher levels of taxes and expenditures, and these choices do not necessarily benefit the public interest. In this context, fiscal limits, such as TELs, can potentially limit the set of alternatives that politicians may choose from and, consequently, influence policy outcomes. Even in this case, however, it is not clear which rules are effective and how the system should be designed.

Moreover, the implementation of TELs is challenging because it is subject to the well-known principal-agent or delegation problem. The idea is that once voters (the principals) set the limits through TELs, the implementation is ultimately delegated to politicians or government officials (the agents), who, as stated earlier, may prefer larger levels of taxes and spending. In order for TELs to achieve their intended objectives, voters should be able to follow the implementation of the rules and monitor governments' current and future actions. But such monitoring is not only costly but also imperfect. As a result, governments driven by self-interest motives might end up adopting alternative and circumventing actions that will partially offset the effects of the limitations. For instance, governments may strategically change their revenue structure and increase reliance on income sources not subjected to limitations.

State-Level TELs

As of 2010, some 30 states have enacted some kind of tax or expenditure limitations, of which 23 have only spending limits, four have only tax limits, and three have both spending and tax limits. The institutional differences across statelevel TELs include the method of codification, approval procedures, type of limit, specification of the growth factors, treatment of surplus revenues, and provisions for overriding or waiving the limit. These institutional differences make some TELs more restrictive and binding than others.

Differences in the means of codification translate into differences in effectiveness. While in some states TELs are statutory, in others they are codified in the state constitutions. Statutory TELs can be more easily modified or rescinded by the legislature, so constitutional TELs are generally considered more effective tools to restrain the government's size.

The methods of approving TELs also vary across states. In general, one of the following procedures is used: citizen initiative (or referendum), legislative proposal, or constitutional convention. These alternatives are not mutually exclusive and a combination of the three may also be observed. For instance, the approval of a citizen initiative may require the approval by the legislature as well.

Differences in the type of limitation are also, of course, highly significant. States establish limits on expenditures, revenues, appropriations, or a combination of them. In principle,

Local-Level Tax and Expenditure Limitations (TELs)

since most states also have balanced-budget provisions in place, expenditure limits should be largely equivalent to revenue limits. In practice, however, revenue limits are more restrictive than spending limits, mostly because spending limits do not generally affect all spending categories, and the spending limits usually apply only to general fund expenditures, not special funds. The latter means that the legislature can always avoid the limits imposed by TELs by transferring funding allocations from one fund to the other. The limits on appropriations are typically set as a percentage of the general revenue estimates.

State TELs vary in how they allow tax revenue or

spending to grow. TELs generally allow tax revenue or spending to increase according to some combination of three variables: personal income growth, population growth, and inflation. Since personal income growth is generally higher than inflation or population growth, limits based on the former factor are considered less restrictive.

The treatment of budget surpluses is another area of variation. Some state TELs include refund provisions that establish precisely what to do in case of a surplus. The most restrictive TELs require state governments to immediately refund any surplus to taxpayers through rebates. Others mandate governments to use the surplus in other ways such as the retirement of debt, the establishment of rainy day or emergency funds, or budget stabilization funds.

Most TELs also include extraordinary procedures to override the constraints. These procedures include, for instance, a specification of majorities required to change the tax or spending limits. More stringent TELs require supermajorities in typically smaller bodies (such as legislative) and/or simple majorities in larger bodies (such as the electorate).

Local-Level TELs

Currently, 41 states in the United States impose some kind of TELs on their respective local governments. The restrictions may fall on the county, municipal, or school district budgets. The table summarizes the types of TELs that typically apply to local governments. The most common form of TELs at the local level is a property tax rate limitation imposed on specific types of local governments.

As with state-level TELs, some of the limitations imposed on local governments are more restrictive than others depending on how easy it becomes for governments to circumvent or

Type of TEL		Description
Specific limits: Property tax limits	Overall property tax rate limit	Apply to all local governments (applies to aggregate tax rate of all local government). Ceiling on the rate; cannot be exceeded without a vote of electorate.
	Specific property tax rate limit	Apply to specific types of local government (municipalities, counties, school districts, and special districts) or specific functions.
	Limits on assessment increases	Limit on the ability of local governments to raise revenue by reassessment of property or through natural or administrative increase of property values.
	Property tax levy limits	Limit on the total amount of revenue that can be raised from the property tax. Generally enacted as an allowable annual percentage increase in the levy determined by population growth and/or inflation.
General limits	General revenue increase limits	Limit on the amount of revenue that can be collected during the fiscal year. Usually enacted as a maximum allowed annual percentage increase from previous year or a maximum share of local income; typically tied to population growth and/or inflation.
	General expenditure increase limits	Cap on the level of spending during the fiscal year. Usually enacted as a maximum allowed annual percentage increase from previous year or a maximum share of local income; typically tied to population growth and/or inflation.
Full disclosure		Requires public discussion and specific legislative vote prior to the enactment of tax increases. Requires formal vote (generally, simple majority) of the local legislative body to increase the tax.

SOURCE: Authors' analysis

override the constraints. For instance, consider a limit on the property tax rate. In this case, the restriction operates only when the rate reaches the ceiling. At this point, tax revenue may still increase, but it will be driven solely by the growth of the tax base. In other words, this limit by itself may not constrain tax revenues. To avoid this kind of outcome, most TELs at the local level combine a property tax rate limit with a limit on property assessment increases. The most restrictive limitations are those that apply to increases in total tax revenue (property taxes and other types of local tax revenue) or aggregate spending. Generally, the limit allows a given annual percentage increase in tax revenue or spending determined by population growth, inflation, or local income.

TELs in the Fifth District

North Carolina and South Carolina are the only two states in the District in which the state-level governments are subject to TELs. In 1991, North Carolina adopted a statute that limits general fund operating budget spending to 7 percent of the forecasted total state personal income for that same fiscal year. South Carolina's spending limit is mandated by the state constitution, which limits the annual increase in appropriations based on an economic growth measure that is determined by the general assembly. The current formula prescribes that an increase in appropriations be limited to either the prior fiscal year appropriations multiplied by the three-year average growth in personal income or 9.5 percent of total personal income reported in the previous calendar year, whichever is greater.

A larger number of Fifth District states impose TELs at the local level. In North Carolina, counties and municipalities are subject to property tax rate limits. Maryland also imposes



property tax limits; however, the limit is on the assessment increase rather than on the rate. West Virginia has the most potentially restrictive set of TELs in the District, with limits on the overall property tax rate as well as specific property tax rates (for agricultural land, for example) and the amount of property taxes that can be collected. South Carolina and Virginia impose no TELs on their municipalities. The District of Columbia limits annual increases in the total property tax levy. (See map and table.)

Full disclosure laws, which require taxpayers to receive notice of anticipated tax rate increases, do not directly restrict or limit revenues or expenditures and are therefore not considered potentially binding. Such laws exist in three states in the District; Maryland, South Carolina, and Virginia each enacted full disclosure legislation around the same time period — between 1975 and 1977. In Maryland and Virginia, the full disclosure laws extend to counties and municipalities, while in South Carolina the measure also includes school districts.

Measuring Outcomes of TELs: Challenges

Evaluating the effectiveness of TELs is not easy for several reasons. First, the empirical analysis is subject to significant methodological challenges. Second, rules and limitations are very heterogeneous across states and local governments. Not only are some rules more restrictive than others, as highlighted earlier, but they have changed over time as well. Finally, when assessing the effectiveness of these constraints on fiscal policies, the evaluation should be performed in relation to their intended objectives.

For instance, do TELs aim to restrict the overall size of government? Do they intend to limit the growth of certain specific taxes or expenditures or alter the composition of government spending and tax revenue?

One of the methodological challenges in research on the effect of TELs is the problem of endogeneity or reverse causality. The problem becomes more significant when examining the impact of TELs on spending or taxes. It may be, for instance, that jurisdictions with relatively high long-run growth rates of taxes and spending would more likely adopt TELs as a tool to achieve stronger fiscal discipline. Ronald Shadbegian, an economist at the National Center for Environmental Economics, noted that "if voters in states with bigger governments are more likely to vote for a TEL and government spending patterns persist over time, then I would expect to find a positive relationship between a TEL and government size, even though a causal relationship does not exist." Hence, failure to acknowledge the fact that the decision to adopt TELs by a government may be endogenous would seriously bias the conclusions of the analysis.

Second, the presence of unobservable factors, such as voters' preferences, which differ systematically across jurisdictions, may bias the results if they are not controlled for, as pointed out by the public choice view. The latter is commonly known as omitted variable bias. The main problem is that preferences are not observable. In order to address this issue and differentiate the effect of TELs on government taxes and expenditures from the corresponding effect of voters' preferences, some research work has relied on panel data regression models.

Measuring Outcomes of TELs: Results

Ideally, as when conducting any kind of policy evaluation, the effectiveness of TELs should be assessed by comparing the fiscal outcome with TELs to the counterfactual outcome that would have occurred in the absence of the limitations. Since it is not possible to carry out such an ideal experiment, the impact of TELs is assessed by comparing the outcomes of the treatment group (TEL states) to those of the control group (non-TEL states). For instance, the work by Poterba examines the different responses of TEL and non-TEL states to negative economic shocks that generate unexpected budget deficits (in his work, he considers the late 1980s and early 1990s).

Research has shown, however, that the robustness of the results and conclusions of such analysis depend on the choice of the control group. To overcome some of the weaknesses explained above, recent work by Paul Eliason of Duke University and Byron Lutz of the Federal Reserve Board of Governors relies on a novel approach known as the "synthetic control method" to construct the control group. The objective of their study is to examine the extent to which one of the most stringent TELs in the United States, Colorado's Taxpayer Bill of Rights (TABOR), constrains government size. Specifically, the synthetic control method relies on observed data to construct an artificial control group based on a weighted combination of non-TEL states. The weights for each state are chosen so that taxes and spending in the control group match taxes and spending in the treatment group prior to the implementation of the limitations.

The earlier literature on TELs focused on how fiscal limits affect government growth. The findings of this research are mixed. For instance, while the work by Poterba concludes that when faced with fiscal distress, TEL states tend to increase taxes by less than non-TEL states, the work by Eliason and Lutz indicates that TABOR does not have any effect on government taxes or spending. To the extent that the institutional irrelevance view correctly assesses the effectiveness of budgetary rules, the absence of a strong relationship between TELs and fiscal policy outcomes should not be surprising. In fact, TELs, according to this view, should not be effective because they are essentially nonbinding.

The lack of association between TELs and government growth may also be attributed to other factors, however. Many researchers highlight the fact that earlier studies did not account for the rich institutional differences across TELs. As noted earlier, TELs are very heterogeneous. For instance, some TELs are more restrictive than others, and it is plausible that the ability of TELs to constrain government size depends precisely on their stringency. In an effort to account for this heterogeneity, Barry Poulson, distinguished scholar at the Americans for Prosperity Foundation, constructed an index of TEL restrictiveness for each of the 50 states. This methodology was later adopted and extended by other researchers. For instance, Lindsay Amiel and Steven Deller, both at the University of Wisconsin, and Judith Stallmann of the University of Missouri conducted several studies using indices like the one developed by Paulson and provide conclusive evidence in favor of following such an approach.

Even when TELs are effective at controlling the growth of specific tax revenues or expenditures, the implementation of TELs in a context where voters cannot fully monitor government actions ends up having numerous unintended effects not fully anticipated or envisioned by their proponents. These effects usually take place when governments take actions to avoid or circumvent the rules established by the legislation.

One way governments may circumvent the restrictions imposed by TELs is by issuing debt. Such a hypothesis is studied by Deller, Amiel, and Stallmann jointly with Craig Maher of the University of Nebraska Omaha. Specifically, they claim that when the limits are imposed only on revenues or only on expenditures, governments would be induced to issue debt. Unlike previous work, which was unsuccessful at documenting such a relationship, their work accounts for the heterogeneity of TELs. Specifically, they found that more restrictive revenue TELs and expenditure TELs are associated with higher levels of government debt. Only TELs that limit revenue and expenditure at the same time restrict the use of debt.

States may still find ways to operate within the limits imposed by TELs by shifting some of their fiscal responsibilities to local governments. James Cox of California State University, Sacramento and David Lowery of Penn State University study such a possibility. They empirically test this hypothesis by comparing the behavior of pairs of TEL and non-TEL states. Their findings do not generally show that states decentralize responsibilities, with the exception of South Carolina. When comparing state revenue as a fraction of total state and local revenue in North Carolina, a non-TEL state at the time of the study, and the corresponding proportion in South Carolina, a TEL state, they found that the latter was remarkably lower. The authors also underscore that South Carolina did not explicitly prohibit the decentralization of fiscal responsibilities to local governments.

Costs of TELs

Even if TELs are successful at achieving their intended goal of restricting government growth, they may do so at the expense of generating other negative effects. It has been claimed, for instance, that TELs might negatively affect the financial stability of the states. A study by Tucker Staley of the University of Central Arkansas found that more restrictive TELs are strongly associated with higher levels of state revenue volatility. At the local level, work by Mathew McCubbins of Duke University and Ellen Moule, then at the University of South Carolina, indicates that the enforcement of property tax limits have induced state and local governments to rely on a system of revenues is generally more income-dependent, such as income taxes, charges, and fees. This means revenues would be subject to even greater fluctuations during the business cycle.

TELs may also affect the quality of services provided by governments. The relationship between TELs, particularly limitations imposed on property tax growth and school quality, has received a lot of attention in the literature. A few studies have found that reduced funding as a result of TELs negatively affects student achievement in public K-12 schools. The work of Thomas Downes of Tufts University and David Figlio of Northwestern University suggests that TELs "lead to reductions in student outcomes that are far larger than might be expected given the changes in spending." Possible explanations for this result include disproportionate cuts in instructional rather than administrative expenditures, higher student-teacher ratios, and a shift especially of the more talented students to private schools. Matt Davis, Andrea Vedder, and Joe Stone of the University of Oregon claim that, in fact, the lower levels of education funding could have been compensated with school-finance equalization and other alternative revenues. They argue, however, that TELs may still have a negative impact on student achievement if these constraints make school funding more unpredictable and volatile, as suggested earlier.

The use of tax and expenditure limitations has spread since first implemented almost 40 years ago; however, the effectiveness of TELs in fulfilling their objectives is still in question. Recent research has led to inconclusive and, at times, contradictory results. Due to the heterogeneity and complexity of TELs, significant methodological challenges remain in answering the question of the effectiveness of these fiscal rules. **EF**