

# The Fiscal and Economic Effects on North Carolina of the Taxpayer Protection Act (Senate Bill 607)

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*State tax expenditure limits (TELs) are intended to limit the size of government by restraining the growth of state revenues. According to the Leviathan hypothesis — a staple from the study of political economy — government has a natural tendency to grow; and as it expands, the economy less and less reflects the marketplace preferences of consumers.*

## Executive Summary

In other words, by consuming an ever greater share of resources, governments have a tendency to “crowd out” the private sector, the predominant driver of economic growth.

The rise of interstate competition for capital and labor forces states, among other considerations, to examine tax policies for their effects on economic growth. Tax and expenditure limitations (TELs) are one way to redirect resources to private sector activity and away from government spending. TELs also seek to introduce certainty in the budget process. The best known TEL can be found in Colorado, which enacted a relatively stringent Taxpayer Bill of Rights (TABOR) in 1992, only to suspend it in 2005 and restore it five years later.

A recent review of the literature suggests that TELs have had mixed success. A survey by the American Enterprise Institute found most TELs are unworkable, often failing to restrain state government spending. A more supportive view suggests that TELs are effective in slowing the growth of government because of the constraints on public debt. Years after its passage in 1992, supporters maintain that Colorado’s TABOR has achieved its goals. They point to Colorado’s low-tax regime, limited debt and strong showings on business climate indices as proof that TABOR works. Others studies suggest that a TEL that is included as part of a “fiscal policy mix” with other binding measures, such as dedicated “rainy day” funds, may improve a state’s financial position.

North Carolina recently cut its income tax from the current rate of 5.75 percent to 5.499 percent beginning in 2017, while expanding the state sales tax (effective 2016). State Senate Bill 607, the Taxpayer Protection Act, is a proposed TEL that would limit tax revenues in an attempt to promote economic growth. S.B. 607 would cut the state individual income tax rate from 5.499 percent to 5 percent in 2019.

What will be the measured effects, positive and negative, of



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the already enacted tax cut and the proposed constitutional amendment on North Carolina's economy? Results from the Beacon Hill Institute's State Tax Analysis Modeling Program (STAMP®), a computable general equilibrium model, indicate that:

- S.B. 607 would save taxpayers \$57 million in 2018 and \$1.35 billion by 2025. Over the entire period, S.B. 607 would save North Carolina's taxpayers \$4.7 billion.
- Furthermore, the two income tax cuts combined would create 6,500 jobs and increase disposable income by \$1.835 billion by calendar year 2025.
- The tax cuts would reduce state income tax revenue collection by \$1.375 billion. However, the economic boost would increase sales tax revenues by \$10 million and other tax revenues by \$25 million, bringing the total tax change to \$1.340 billion.
- Local governments would see their tax revenues increase by \$17 million.

Notably, the revenue lost to the state from the income tax cut is only \$10 million larger than the

difference between the projected growth in General Fund spending using the historical trend and the growth in spending under the TEL.

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## Introduction

The literature on the relationship between taxation and economic performance is vast, varied and contentious. A growing body of work — using a set of more sophisticated analytical tools — has found that there is a negative relationship between higher levels of taxation and economic performance.<sup>1</sup> The rise of interstate competition for capital and labor forces states, among other considerations, to examine tax policies for their effects on economic growth. Tax and expenditure limitations are one way to redirect resources to private sector activity and away from government spending.<sup>2</sup> TELs also seek to introduce certainty in the budget process.

**The Historical Experience with TELs.** A recent review of the literature suggests that TELs have had mixed success. A survey by the American Enterprise Institute found that most TELs are unworkable, often failing to restrain state government spending.<sup>3</sup> A more supportive view suggests that TELs are effective in slowing the growth of government because of the constraints on public debt.<sup>4</sup>

The best known TEL can be found in Colorado, which enacted a relatively stringent Taxpayer Bill of Rights (TABOR) in 1992, only to suspend it in 2005 and restore it five years later.<sup>5</sup> A mostly dormant Massachusetts tax cap law, with its high revenue threshold and revisions, sits at the other end of the spectrum, having triggered a tax rebate only once.

Years after its passage in 1992, supporters maintain that Colorado’s TABOR has achieved its goals. They point to Colorado’s low-tax regime, limited debt and strong showings on business climate indices as proof that TABOR works.<sup>6</sup> Others studies suggest that a TEL that is included as part of a “fiscal policy mix” with other binding measures, such as dedicated “rainy day” funds, may improve a state’s financial position.<sup>7</sup>

In 1991, North Carolina adopted a TEL limiting annual spending to 7 percent or less of total state personal income.<sup>8</sup> According to the Bureau of Economic Analysis:

- From 1997 to 2006, North Carolina state and local government spending as a fraction of total Gross State Product (GSP) averaged about 9.3 percent, while total personal income grew an annual average of 5.6 percent.<sup>9</sup>
- However, from 2007 through 2011 state and local government spending surged to an average of 10.1 percent of GSP, while personal income grew only 2.5 percent annually.
- Since 2012, state and local government spending in North Carolina has fallen to 10 percent of state output,

according to U.S. Census figures.<sup>10</sup>

Much of the increase in state and local government spending in North Carolina is a direct result of the recession that hit the U.S. economy in 2008. However, even as growth in the state economy returned in 2010 and 2011, spending continues at elevated levels.

A North Carolina TEL could be imposed in such a way as to limit the annual growth of government spending to inflation and the population growth rate. In other words, government spending would be constant in real per-capita terms from one year to the next.

**The Argument for Limiting the Fiscal State.** The argument that there should be external constraints on government spending has roots in Public Choice, the discipline that emerged in the 1960s largely as a result of the work of economists James M. Buchanan and Gordon Tullock. The Public Choice School called into question the conventional view that, under democracy, lawmakers could be trusted to behave as selfless promoters of the public interest.<sup>11</sup> Contrary to this idealized view, Buchanan, Tullock and their followers offered an alternative view — that lawmakers are motivated as much by self-interest as any businessman or consumer. Because lawmakers seek power and influence, much as any self-interested businessman seeks profits or any consumer seeks utility, it is necessary to constrain their freedom to tax, spend, regulate and otherwise manipulate policy to their personal ends. The theory suggests that vote-trading by politicians over taxation, spending and regulation will eventually diminish economic efficiency while eroding liberty.

Proponents of a TEL argue that, because an expansion in government spending is inherently damaging to the economy, the adoption of a TEL will lead to measurable improvements in some indicator of economic activity, say, gross output or income per person. Opponents believe that state legislatures should have more discretion in responding to shocks, and to the long-term needs of the citizenry.

By itself, a TEL does not dictate which programs should be funded. Instead it sets what its proponents believe to be a reasonable constraint on the growth of spending. The constraint forces lawmakers to spend prudently, prioritizing claims on state resources. A TEL does not limit the services that government can provide, but only what it can spend on services. Constrained by spending limits, lawmakers will be compelled to find ways to get more services from fewer dollars.

Because a TEL keeps the “real” (inflation-adjusted) per-capita size of government constant and because real per-capita tax revenues rise during periods of economic



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growth, a TEL also imposes constraints on state tax policy. As tax revenues exceed allowable spending, the state must either cut tax rates or dispose of excess revenues by refunding them to taxpayers or putting them into a “rainy day” fund. Ultimately, under a TEL, the redundancy of a substantial portion of tax revenues creates a presumption in favor of cutting tax rates.

A TEL provides potential benefits stemming from the changes in tax policy that it ultimately necessitates. If the state reduces tax rates to limit the flow of revenue, the economy will benefit from the resulting increase in the after-tax reward for working or living in the state. If the state puts the excess revenue in a “rainy day” fund, it will insulate itself against economic downturns. Finally, proponents argue that voters are always free to approve extra spending or taxes and that a TEL does not therefore hamper the “people’s will” to expand government, should that be what the people desire.<sup>12</sup>

### How Does Government Spending Affect Economic Activity?

The effects of government spending on economic activity depend in large measure on how government spends. Up to some point, expenditures on roads and bridges as well as education tend to increase productivity, whereas other expenditures may have no effect or even a negative effect on productivity. Transfer payments in the form of welfare spending and unemployment benefits reduce poverty to a point, but also discourage recipients from working. Social Security benefits may discourage saving. Subsidies to politically-favored activities distort prices and lead to inefficient expansion of the subsidized activities.

Government spending thus exerts both positive and negative effects on economic activity. Government expenditures can lead to productivity increases or decreases, depending on the size of government relative to gross domestic product.<sup>13</sup> At first, productivity rises with the government spending and then reaches a maximum when government attains its optimal size. However, further increases in government spending per dollar of output cause productivity to fall.

One well-known study by economist Edgar Peden suggests the optimal size of government in the United States relative to GDP is 17 percent.<sup>14</sup> According to Peden’s study, the last optimal ratio was found during the turn of the New Deal in the early 1930s and “since then the government sector has been a drag on productivity.”<sup>15</sup> To summarize public choice economist Dennis Mueller:

“The relationship between the relative size of the public sector and economic performance,

as measured by either productivity in the private sector or growth in GDP per capita is an inverted-U. Too small of a government sector can harm economic performance by denying the economy infrastructure and the educated labor force it needs to perform optimally. Beyond some point, however, the adverse incentive effects of government activity begin to outweigh its positive effects on economic performance. *All of the highly developed countries in the world appear to be in the downward sloping part of the curve.* [emphasis added]”<sup>16</sup>

In a renowned cross-country study of economic growth, economist Robert J. Barro recognized that “if the government improves the climate for business activity — say, by reducing burdens from regulation, corruption, and taxation or by enhancing property rights — the growth increases for a while.”<sup>17</sup> However, Barro found a negative relationship between economic growth and “nonproductive” government spending, defined as all spending with the exception of defense and education.<sup>18</sup>

Table I identifies seven studies that provide estimates of the relationship between different measures of government size and economic well-being.<sup>19</sup> The elasticities listed in the far right column indicate the percentage change in the economic variable considered in each study that would result from a 1 percent change in the government spending variable. For example, Engen and Skinner find that a 1 percent increase in government spending as a percentage of GDP reduces output by 0.14 percent. The other studies likewise indicate a negative relationship between government spending and economic activity.

### Senate Bill 607: The Taxpayer Protection Act

In August 2015, the North Carolina Senate passed Senate Bill 607: *The Taxpayer Protection Act*. Once it passes the House, the measure will go before the voters in a referendum. The bill would amend the state’s constitution to include a TEL and cut the income tax rate to 5 percent. Specifically, the bill would:

- Limit General Fund spending to the growth rate of the Consumer Price Index (CPI) for the previous three calendar years, plus the growth rate of the state’s population for the previous three fiscal years;
- Reserve two percent of the amount appropriated from the General Fund to the Emergency Savings Reserve Fund (ESRF) until the emergency fund contains an amount equal to 12.5 percent of the operating General Fund receipts;

- Lower the state income tax to 5 percent from 5.499 percent;
- Require a two-thirds majority vote in the General Assembly to override the first two items and require the bills be read three times in each house; and
- Limit expenditures starting in fiscal year 2017; and begin contributions to the ERSF in fiscal year 2016, with the tax cut applied on January 1, 2020.

### Economic Modeling Results.

The Beacon Hill Institute at Suffolk University (BHI) modeled the effects of S.B. 607 on the North Carolina state budget and economy. The model results begin with 2018 because the General Assembly has already enacted the budgets for the 2016 – 2017 biennium. The spending level in this biennial budget is below the TEL requirement for each year. Table II contains the results.

The first line of the table shows the TEL growth rate based on the U.S. Census Bureau projection of North Carolina population growth and a 2 percent increase in the CPI.<sup>20</sup> It is assumed that the U.S. Federal Reserve is successful in keeping inflation at its 2 percent target rate.

Lines 2-3 indicate General Fund spending growth at the historic annual rate of 4.02 percent since 2000 and under the TEL, respectively.<sup>21</sup> Line 4 shows the difference between the two spending amounts. The last three (5-7) show the 2 percent required contribution to the ERSF, the balance of the ERSF and its 12.5 percent limit.

In 2018, the difference between the TEL limit and historical spending would yield a savings of \$57 million. However, the Taxpayer Protection Act requires the state to reserve 2 percent, or \$455 million, of its revenue for the ERSF; thus, policymakers would need to find another \$398 million for the ERSF.

The ERSF had a balance of \$651 million at the end of fiscal year 2014 and the 2015-2017 budget calls for the deposit of \$200 million into the fund. In October 2015, the legislature added another \$250 million.<sup>22</sup> Assuming that the balance beginning in 2018 is \$1,101 million, adding \$455 million in fiscal year 2018 would raise the balance of the ERSF to \$1,556 million, well below the 12.5 percent cap on state spending of \$2.843 billion.<sup>23</sup>

**Table I**  
**Selected Government Spending Elasticities**

Study	Government Spending Variable	Economic Variable	Elasticity
Engen and Skinner (1992)	Government spending as a percentage of GDP	GDP output	-0.14
Hansson and Henrekson (1994)	Government consumption spending	Total factor productivity	-0.14
Guseh (1997)	Several measures of government size	GDP growth	-0.14
Abrams (1999)	Government spending as a percentage of GDP	Unemployment	0.36
Bates (2001)	Reduction in government spending as a percentage of GDP	GDP growth	-0.06
Gwartney, Lawson and Holcombe (2003)	Government spending as a percentage of GDP	GDP growth	-0.1
Tuerck, Bachman, Sanchez-Penalver, Hausman (unpublished)	State spending per dollar of Gross State Product (GSP)	GSP per Capita	-0.1

Moving through the fiscal years, the difference between the TEL spending level and the historic level compounds. By fiscal year 2025, the difference between the two spending levels would reach \$1.325 billion. In 2022, the difference becomes larger than the required contribution to the ERSF (\$636 million versus \$236 million). The ERSF also reaches its limit in 2022, allowing the required contribution to fall below \$115 million through 2025.

The Taxpayer Protection Act would also reduce the state income tax to 5 percent in calendar year 2020, which would be the mid-point of fiscal year 2019. However, the legislature recently cut the income tax to 5.499 percent beginning in 2017 and expanded the sales tax to “repair, installation and maintenance services” in 2016. The legislation leaves the North Carolina Department of Revenue to define which services are subject to the tax.<sup>24</sup> BHI used its State Tax Analysis Modeling Program (STAMP®) model for North Carolina to assess the economic impact of the income tax changes, but not the sales tax, since the details are not yet available. Table III displays the results for the years 2017 and 2025.

The income tax cuts boost the local economy. The initial tax cut to 5.499 percent would increase private sector jobs by 2,200, the cut to 5 percent would increase employment by another 4,300 jobs. The tax cuts combined with the increase in jobs would raise real

**Table II**  
**Fiscal Effects of the Taxpayer Protection Act**  
 (in millions of dollars, unless indicated)

Year	2018	2019	2020	2021	2022	2023	2024	2025
1. TEL Spending rate (%)	3.76	3.76	3.38	3.36	3.34	3.31	3.29	3.27
2. General Fund - Historic	22,800	23,717	24,670	25,661	26,692	27,765	28,881	30,041
3. General Fund - TEL	22,743	23,598	24,396	25,215	26,056	26,920	27,806	28,716
4. Difference	57	118	274	446	636	845	1,075	1,325
5. Contribution to ESRF	455	472	488	504	236	108	111	114
6. ESRF Balance	1,556	2,028	2,516	3,021	3,257	3,365	3,476	3,590
7. ESRF limit of 12.5% of GF	2,843	2,950	3,050	3,152	3,257	3,365	3,476	3,590

The researchers found that across all models, restrictive revenue TELs had a negative impact on credit ratings. However, more restrictive expenditure TELs had a positive impact on all models that examined Moody's credit ratings and models that included economic

disposable income by \$595 million in 2017 and surge to \$1.835 billion in 2025.

The tax cuts would reduce projected state income tax revenue collection by \$460 million in 2017. However, the economic boost would increase sales tax revenues \$4 million and other tax revenues \$9 million, bringing the total tax loss to \$441 million in 2017. Local governments would see their tax revenues increase \$6 million in 2017.

Reducing the income tax to 5 percent would cause income tax revenues to fall \$915 million in 2025. In 2025, sales tax revenues would increase \$6 million and other tax revenues \$16 million, bringing the total tax change to \$893 million in 2025. Local governments would see their tax revenues increase \$11 million in 2025.

The combination of the two tax cuts would reduce state revenues \$1.340 billion and increase local tax revenues by \$17 million. The revenue lost to the state from the income tax cut is only \$10 million larger than the savings to the General Fund from imposing the TEL.

### TELs and State Credit Ratings

Despite the economic benefits of TELs, some policymakers are concerned about their effect on a state's credit rating. The argument is that if a state imposes a restrictive TEL, the perception by credit rating agencies of the state's ability to pay on outstanding bonds is compromised. Researchers from the University of Missouri – Columbia, University of Wisconsin – Madison and Northern Illinois University examined the Standard and Poor's and Moody's credit ratings of U.S. states from 1973 to 2005.<sup>25</sup> They included various fiscal and economic indicators which are thought to be used by bond rating agencies in determining credit ratings, including changes in per capita income, unemployment, state taxes and debt per \$1,000 of income, and an index representing six characteristics of a state's TEL.<sup>26</sup> They ran several models, some including just the TEL indices and others including the fiscal and economic variables.

and fiscal variables for the S&P ratings. TELs that restricted both revenue and expenditures were negatively associated with Moody's credit ratings but were not statistically significant to the S&P ratings.

These findings could be of concern to even the most avid supporters of TELs, but it is important to note that North Carolina's "rainy day" fund stands at \$1.2 billion, which could have a positive impact on the state's credit rating. Researcher Cleopatra Grizzle measured the effect of various economic and fiscal variables on states' general obligation bond ratings (Moody's) from 1997 to 2006. She rated each state's budget stabilization fund on an index scale from 0 to 5; 0 meaning that the state has no such fund, and 5 meaning the state has the strictest budget stabilization fund.<sup>27</sup>

Grizzle found that a state having a large rainy day fund (5 percent or more of a state's budget) and strong deposit requirements is associated with higher credit ratings. However, having stringent withdrawal rules is associated with lower credit ratings due to assumptions that the inability to access the rainy day fund means tax hikes and budget cuts during recessionary periods.<sup>28</sup>

### Conclusion

Tax and expenditures limitations, such as the one North Carolinians could consider on the ballot next fall, are mechanisms to change the course of state government. Time and time again state governments grow in response to crises but never retrench once those crises recede. Never letting a crisis go to waste, state governments tend to go off track and drift into spending increases thus indirectly crowding out private sector activity over the long term. By placing limits on revenue and specifying a reasonable tax base, TELs are a rules-based tool to restrain excess spending and thus limit deadweight losses of taxation to the economy.



The past successes and failures of TELs rest in their stringency and those results are subject to varied interpretations. Of the many TELs imposed since 1992, only Colorado has earned the reputation for limiting government and improving the state's business climate. Most others have failed to meet expectations because they are designed without much force, loosened by contingencies (even in strong TELs environments, such as Colorado) or simply side-stepped. How effective a North Carolina TEL would be depends on the assumption that legislators will not work around its restrictions in good times and bad. For those who believe in activist government, TELs, whether they are effective are not, are undesirable restraints to have on the books.

S.B. 607 would present voters with a trade-off: less government spending and more private sector resources. To be sure, government revenues would be "lost," but those revenues would be shifted to the point from where they originated: the private economy, which drives growth. If voters approve S.B. 607, they are consenting to the view that limited government is the best option to grow the North Carolina economy.

## Notes

1. William McBride, "What Is the Evidence on Taxes and Growth?" Tax Foundation, December 2012, available at <http://taxfoundation.org/article/what-evidence-taxes-and-growth>; for an alternative view, see Chye-Ching Huang and Nathaniel Frentz, "What Really Is the Evidence on Taxes and Growth? A Reply to the Tax Foundation," Center for Budget and Policy Priorities, February 2014, available at <http://www.cbpp.org/cms/index.cfm?fa=view&id=4094>; and for a response to the public investment model, see Arthur Laffer, Stephen Moore and Jonathan Williams, "There they go again: A new dose of junk economics," in *Rich States, Poor States*, 6th edition of the ALEC-Laffer State Economic Competitiveness Index, pages 38-53.
2. For a review of the current state TELs see Tax Policy Center, "Tax and Expenditure Limits 2005-2008, 2010," April 5, 2013. Available at <http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=495>.
3. Benjamin Zycher, "State and Local Spending: Do Tax and Expenditure Limits Work?" American Enterprise Institute, May 2013. Available at <http://www.aei.org/files/2013/05/07/->

**Table III**  
**Economic Effects of Cutting the North Carolina**  
**Income Tax to 5 Percent**

	2017	2025	Total
Private employment (jobs)	2,200	4,300	6,500
Investment (millions of dollars)	0.4	0.6	1
Real disposable income (millions of dollars)	595	1,240	1,835
<b>Fiscal Effects (millions of dollars)</b>			
Personal Income Tax	-460	-915	-1,375
Sales Tax	4	6	10
Other State Taxes	9	16	25
<b>Total</b>	<b>-447</b>	<b>-893</b>	<b>-1,340</b>
Local Taxes	6	11	17
<b>Total Tax Change</b>	<b>-441</b>	<b>-882</b>	<b>-1,323</b>

state-and-local-spending-do-tax-and-expenditure-limits-work\_152855963641.pdf.

4. Robert Krol, "The Role of Fiscal and Political Institutions in Limiting the Size of State Government." *Cato Journal*, Volume 27, No. 3, 2007. Available at <http://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2007/11/cj27n3-8.pdf>.
5. Voters in Colorado passed Referendum C in 2005, effectively suspending TABOR for five years. The limits in TABOR were reenacted in 2010.
6. Barry Poulson, "Colorado's Budget: TABOR still working," *Denver Post*, July 20, 2009. Available at <http://tax.i2i.org/2009/07/20/colorados-budget-tabor-still-working/>
7. John Merrifield and Barry W. Poulson, "State Fiscal Policies for Budget Stabilization and Economic Growth: A Dynamic Scoring Analysis," *Cato Journal*, Vol. 34, No. 3, 2014. Available at <http://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2014/2/v34n1-3.pdf>.
8. "State Tax and Expenditure Limits – 2012," National Council of State Legislatures.
9. Gross state product (GSP) is the final market value of all goods and services produced within a state in given period of time. Personal income is "the sum of wages and salaries, supplements to wages and salaries, proprietors' income with inventory valuation (IVA) and capital consumption adjustments (CCAdj), rental income of persons with capital consumption adjustment (CCAdj), personal dividend income, personal interest income and personal current transfer receipts, less contributions for government social insurance plus the adjustment for residence," Bureau of Economic Analysis. Available at <http://www.bea.gov/regional/definitions/>.
10. U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Accounts, Gross State Product. Available at <http://www.bea.gov/region/gsp/>.

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11. See, for example, James M. Buchanan and Gordon Tullock, *The Calculus of Consent* (Ann Arbor: University of Michigan Press, 1962).
12. Fred Holden, “A Decade of TABOR: Ten Years After: Analysis of the Taxpayer’s Bill of Rights,” Independence Institute, June 8, 2003, page 2.
13. See Edgar A. Peden, “Productivity in the United States and Its Relationship to Government Activity: An Analysis of 57 Years,” in *Public Choice* Vol. 86, December 1991, pages 143-73, as quoted in Dennis Mueller, *Public Choice III* (Cambridge, U.K.: Cambridge University Press, 2003), page 546.
14. Ibid.
15. Dennis Mueller, *Public Choice III*, pages 548-554.
16. Ibid, page 560.
17. Robert J. Barro, *Determinants of Economic Growth: A Cross-Country Empirical Study* (Cambridge, Mass: The MIT Press, 1997), page 9.
18. Ibid., page 26.
19. Based on references in Daniel Mitchell, “The Impact of Government Spending on Economic Growth,” Heritage Foundation, Backgrounder 1831, March 2005, available at [http://www.heritage.org/Research/Budget/bg1831\\_suppl.cfm#\\_ftn74](http://www.heritage.org/Research/Budget/bg1831_suppl.cfm#_ftn74). References cited by Mitchell include: Par Hansson and Magnus Henrekson, “A New Framework for Testing the Effect of Government Spending on Growth and Productivity,” *Public Choice*, Vol. 81, 1994, pages 381-401; James S. Guseh, “Government Size and Economic Growth in Developing Countries: A Political-Economy Framework,” *Journal of Macroeconomics*, Vol. 19, No. 1, Winter 1997, pages 175–192; Burton Abrams, “The Effect of Government Size on the Unemployment Rate,” *Public Choice*, Vol. 99, Nos. 3-4, June 1999, pages 395-401; Winton Bates, “How Much Government? The Effects of High Government Spending on Economic Performance,” New Zealand Business Roundtable, July 2001, page 9; Eric M. Engen and Jonathan Skinner, “Fiscal Policy and Economic Growth,” National Bureau of Economic Research, Working Paper No. 4223, 1992, page 3; and James Gwartney, Robert Lawson and Randall Holcombe, *The Size and Functions of Government and Economic Growth*, Joint Economic Committee of Congress, April 1998, available at [http://ohu.people.yasu.edu/articles/govt\\_size\\_economic\\_growth.pdf](http://ohu.people.yasu.edu/articles/govt_size_economic_growth.pdf).
20. Based on data available as of November 2015; see “NC Census Lookup State Comparisons,” North Carolina (LINC), Office of State Budget and Management. Available at [http://data.osbm.state.nc.us/pls/linc/dyn\\_linc\\_main.show](http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show).
21. The North Carolina Legislature Fiscal Research Division calculates the rate from 2002 – 2009 as 5.3 percent. Available at <http://www.ncleg.net/fiscalresearch/presentations/Major%20Budget%20Drivers%20FER%202009.pdf>. Based on the budgets, we calculate the growth rate from 2010 – 2017 as 2.2 percent. The average is 4.02 percent.
22. General Fund Monthly Financial Report, October 31, 2015, page 2. Available at [http://www.osc.nc.gov/pdfs/Oct\\_2015\\_Gen\\_Fund\\_Monthly\\_Report.pdf](http://www.osc.nc.gov/pdfs/Oct_2015_Gen_Fund_Monthly_Report.pdf).
23. Comprehensive Annual Financial Report For the Fiscal Year ended June 30, 2014, prepared by Statewide Accounting staff, Office of the State Controller, December 2, 2014, page 15. Available at [http://www.ncosc.net/financial/14\\_cafir/2014\\_Comprehensive\\_Annual\\_Financial\\_Report\\_bookmarks.pdf](http://www.ncosc.net/financial/14_cafir/2014_Comprehensive_Annual_Financial_Report_bookmarks.pdf). See also General Assembly of North Carolina, Session 2015, SL 2015-241, H.B. 97, 2015, page 4. Available at <http://www.ncleg.net/Sessions/2015/Bills/House/PDF/H97v9.pdf>.
24. “NC budget: More sales taxes in 2016, income tax cuts in 2017,” *News and Observer*, State Politics, September 19, 2015. Available at <http://www.newsobserver.com/news/politics-government/state-politics/article35825601.html#storylink=cpy>.
25. Judith I. Stallman et al., “Tax and Expenditure Limitations and State Credit Ratings,” *Public Finance Review*, Vol. 40, No. 5, pages 643 to 669.
26. The six characteristics are (1) type of TEL, (2) constitutional or statutory, (3) growth restriction, (4) method of approval, (5) override provisions, and (6) exemptions. The higher the index number assigned to the TEL, the more restrictive the TEL.
27. Cleopatra Grizzle, “The Impact of Budget Stabilization Funds on State General Obligation Bond Ratings,” *Public Budgeting and Finance*, Vol. 30, No. 2, pages 95-111. An index rating of 5 indicates the state’s BSF is constitutional, not statutory, with strict deposit and withdrawal requirements, and a cap on its fund that is greater than 5 percent.
28. Ibid.