



RUTGERS SPAA RESEARCH BRIEF

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Cap and Gap: The Fiscal Effects of Property Tax Levy Limits in New York

Under Chapter 97 of the Laws of 2011, the state of New York (NY) established a property tax levy limit (herein referred to as the tax limit) that affects all local governments with property taxing power, including school districts. Effective in fiscal year 2013, the tax limit basically restricts the annual growth of property tax levies to two percent or the rate of inflation, whichever is less. The tax limit has been criticized for limiting NY school districts' ability to raise property taxes—their largest revenue source—for educational services (Yinger 2019). Recent data from the NY State Education Department (NYSED) seem to support this criticism. In fiscal years 2017 and 2018, 369 (55 percent) and 328 (49 percent) of the districts, respectively, proposed to raise taxes by every dollar they could within the limit. A few districts (e.g., 36 districts in 2017) even proposed to override the tax limit. Despite criticisms, the New York State Senate and Assembly recently made permanent the limit, which had been scheduled to expire in 2020 (NY State Department of Taxation and Finance 2020).

Research Questions

The tax limit in NY is one of the most recent examples of state-imposed tax and expenditure limitations (TEs) which have been adopted in many states in the U.S. (Downes and Figlio 2015; Lincoln Institute of Land Policy and George Washington Institute of Public Policy 2020). To provide new evidence on the effect of TEs on school finance, this study focuses on the tax limit in NY and seeks to answer three closely related research questions. Considering not all TEs are fiscally constraining, the first question is whether the tax limit has a constraining effect, or has put an effective cap, on NY school districts' total current expenditures per pupil. The second research question is whether the tax limit may have differential expenditure-stifling effects on different district groups. Third, this study asks which expenditure categories and subcategories bear the brunt of this constraint; that is, how districts under fiscal constraint make spending cuts across different functions.

Literature Review

Applied public finance scholars have extensively investigated the intended efficacy and unintended consequences of TEs. The literature demonstrates two contrasting

perspectives: the “institutional irrelevance view” holds that fiscal rules can be strategically circumvented by local governments in many ways, whereas the “public choice view” suggests that fiscal rules represent important and effective constraints on the behavior of local political actors (Poterba 1996).

Empirical research on the fiscal impact of TELs on local general-purpose governments basically buttresses the “institutional irrelevance view” by pinning down multiple strategies that localities have employed to escape the constraint of TELs (Mullins and Joyce 1996; Shadbegian 1999; Skidmore 1999; Hoene 2004; Cheung 2008; McCubbins and Moule 2010; Sun 2014; Zhang 2018; Eliason and Lutz, 2018; Zhang and Hou, 2020). However, when it comes to school districts, studies on the fiscal impact of TELs provide mixed findings. Based on 17 empirical articles, a meta-regression analysis finds that TELs have a complex effect on education financial resources, and recent studies are more inclined to support the “public choice view” when compared to studies conducted in the past (Ballal and Rubenstein 2009).

Identification Strategies

By definition, a property tax levy limit is fiscally constraining or binding when it prevents a school district from reaching the level of total spending desired or preferred by local voters (or determined by the local median voter). This definition suggests that “at-limit” school districts—those that exhaust the limit—are most likely constrained by the tax limit. We adopt a difference-in-differences (DID) estimation approach by exploiting unaffected or far-from-limit districts as counterfactuals for at-limit school districts.

$$\ln E_{it} = \tau_t + \mu_i + \alpha D_{it} + \beta P_{it} + \delta T_{it} + \beta W_{it} + \epsilon_{it},$$

where E stands for total current expenditures per pupil, D is a binary indicator which refers to being at limit, P stands for a linear pre-limit trend, T stands for post-trend variables, W includes a set of cost, demand and efficiency variables, and τ_t and μ_i represent year- and district-fixed effects, respectively. We also employ an event study specification to investigate causal links between the tax limit and changes in school districts’ spending behaviors.

$$\ln E_{it} = \tau_t + \mu_i + \sum_{k=-4}^5 \theta_k T_{k,it} + \beta W_{it} + \epsilon_{it},$$

where $T_{k,it}$ is a set of lead and lag dummy variables for when a school district is at limit. For example, $T_{1,it}$ equals 1 one year after a district is at limit, and $T_{-1,it}$ equals 1 one year prior to being at limit.

Empirical Results

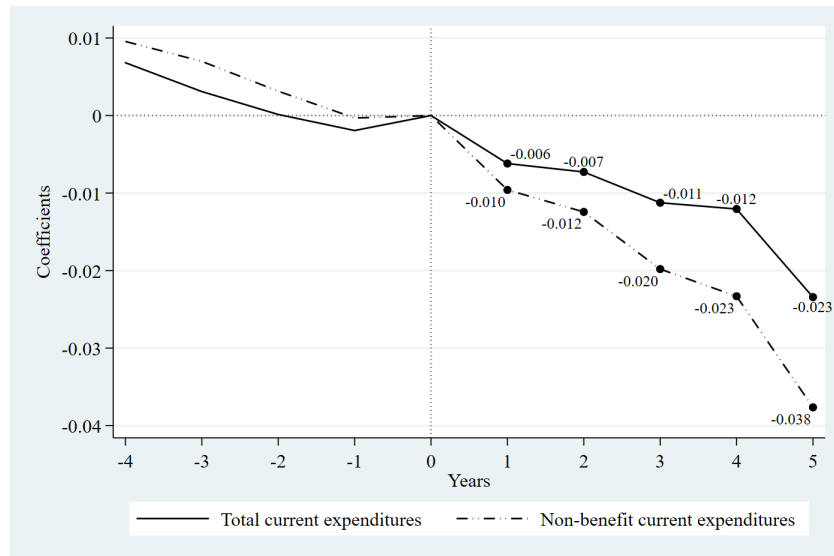
Based on a data panel of 666 school districts in New York between 2011 and 2017, we find strong evidence to support the public choice view that the tax limit has put an effective cap or constraint on at-limit school districts in the first five years of implementation, as shown in Figure 1.

The tax limit’s constraining effects also vary across at-limit district groups, as shown in Figure 2. On the one hand, rural high-need districts do not show limit-induced constraint on all expenditure categories and subcategories. This makes sense to us because of all district types, rural high-need districts rely the least on property taxes in their annual budget. On the other hand, school districts with a heavier reliance on property tax revenue may find it difficult to escape from the fiscal pressure. Indeed, the tax limit does negatively affect total current expenditures for at-limit districts in the other three district groups in our analysis.

We also find that at-limit school districts in the three affected groups do not make equal or similar cuts across current functions. Consistent with Downes and Figlio’s (2015) explanation of union rents, the two largest union-protected items (teacher salary and benefits), which account for 53 percent to 58 percent of total current expenditures, appear to remain unscathed across at-limit districts. We find that reductions are made in other instructional salaries/expenses, central administration, transportation, interfund transfers, and undistributed categories, all of which taken together represent approximately one fifth of the three affected groups’ total current expenditures. Finally, contrary to earlier findings that increased state aid might compensate for declines in local own-source revenue (Shadbegian 2003), we find that intergovernmental aid provides little help in offsetting expenditure gaps imposed by the tax limit.

Figure 1.

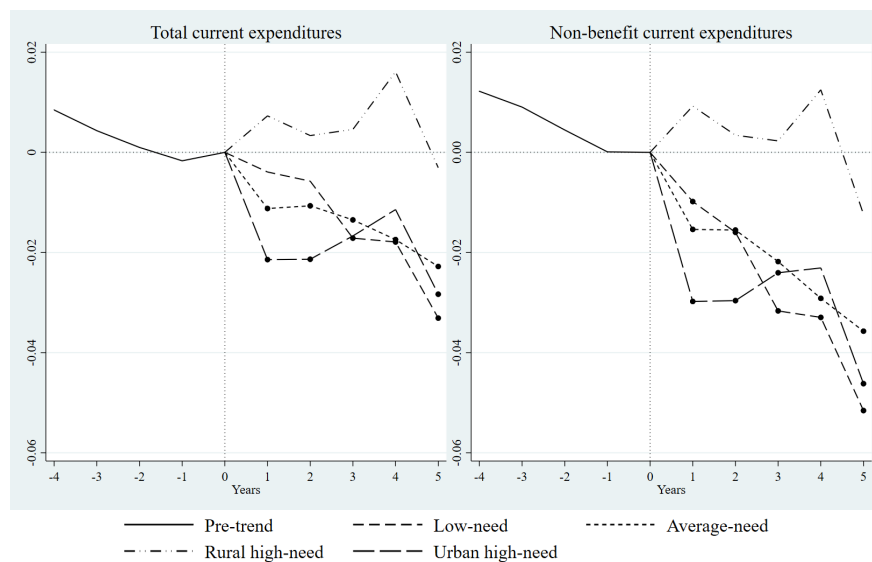
The Effects of the Tax Limit on Total Current Expenditure and Non-Benefit Current Expenditure



Note: The graph visualizes the event-study regression results. The vertical dotted line (i.e., year = 0) represents when a school district became at-limit during our sample period. A black circle indicates a significance level of at least five percent.

Figure 2.

The Effects of the Tax Limit on Total Current Expenditure and Non-Benefit Current Expenditure by Group



Note: The graph visualizes the event-study regression results by group. The vertical dotted line (i.e., year = 0) represents when a school district became at-limit during our sample period. A black circle indicates a significance level of at least five percent.

Future Studies

Our focus on the tax limit in a single state warrants a caveat—our empirical findings should not be externalized to other state-imposed TEL provisions with different designs or rules. In addition, this study looks only at the tax limit’s fiscal effects in its first five years and leaves several issues unanswered. For example, how will school districts fiscally cope with this tax limit over the

long term? Do the limit-induced expenditure gaps found in this study lead to gaps in student performance? Does the property tax cap also have any constraining effect on capital spending? Most importantly, while the ongoing COVID-19 pandemic's full impact on the state economy remains to be seen, how will the tax limit compound the fiscal constraint on school districts' local resources caused by the COVID-19 pandemic? All of these questions warrant future research.

This brief is based on the full article:

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References

- Ballal, Sonali, and Ross Rubenstein. 2009. The effect of tax and expenditure limitations on public education resources: A meta-regression analysis. *Public Finance Review* 37(6): 665–685.
- Cheung, Ron. 2008. The effect of property tax limitations on residential private governments: The case of Proposition 13. *National Tax Journal* 61(1): 35–56.
- Downes, Thomas, and David Figlio. 2015. Tax and expenditure limits, school finance and school quality. In *Handbook of Research in Education Finance and Policy*, edited by Helen Ladd and Margaret Goertz, 2nd ed., pp. 341–353. New York, NY: Routledge.
- Eliason, Paul, and Byron Lutz. 2018. Can fiscal rules constrain the size of government? An analysis of the “crown jewel” of tax and expenditure limitations. *Journal of Public Economics* 166(C): 115–144.
- Hoene, Christopher. 2004. Fiscal structure and the post-Proposition 13 fiscal regime in California's cities. *Public Budgeting & Finance* 24(4): 51–72.
- Lincoln Institute of Land Policy and George Washington Institute of Public Policy. 2020. Significant Features of the Property Tax. Available <https://bit.ly/2E63Ju0>. Accessed 2 August 2020.
- McCubbins, Mathew, and Ellen Moule. 2010. Making mountains of debt out of molehills: The pro-cyclical implications of tax and expenditure limitations. *National Tax Journal* 63(3): 603–21.
- Mullins, Daniel, and Philip Joyce. 1996. Tax and expenditure limitations and state and local fiscal structure: An empirical assessment. *Public Budgeting & Finance* 16(1): 75–101.
- New York State Department of Taxation and Finance. 2020. 2019 property tax-related legislation. Available <https://on.ny.gov/30Vk2m3>. Accessed 2 August 2020.
- Shadbegian, Ronald. 1999. The effect of tax and expenditure limitations on the revenue structure of local government, 1962–1987. *National Tax Journal* 52(2): 221–238.
- Shadbegian, Ronald. 2003. Did the property tax revolt affect local public education? Evidence from panel data. *Public Finance Review* 31(1): 91–121.
- Skidmore, Mark. 1999. Tax and expenditure limitations and the fiscal relationships between state and local governments. *Public Choice* 99(1): 77–102.
- Sun, Rui. 2014. Reevaluating the effect of tax and expenditure limitations: An instrumental variable approach. *Public Finance Review* 42(1): 92–116.
- Yinger, John. 2019. The case against New York State's tax cap. *It's Elementary*, January 2019. Available <https://bit.ly/320bRUE>. Accessed 2 August 2020.
- Zhang, Pengju. 2018. The unintended impact of tax and expenditure limitations on the use of special districts: The politics of circumvention. *Economics of Governance* 19(1): 21–50.

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