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A Circuit Breaker for New York State?

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It's Elementary

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A Circuit Breaker for New York State?

As part of his executive budget for 2015-16, New York Governor Andrew Cuomo has proposed new property tax relief in the form of a circuit breaker.[1] This column evaluates this proposal.

New York State already has one major property tax relief program, namely, the School Tax Relief Program or STAR, which is an exemption from school property taxes. As I have explained in previous columns (e.g. July 2014), STAR does indeed lower the burden of property taxes, particularly on the homeowners with the least valuable homes within a given school district, but it also has several important flaws.

The main flaws are (1) it does not provide any property tax relief to renters, (2) it provides far more relief to homeowners in the wealthiest counties than in the least-wealthy counties, (3) it gives taxpayers an incentive to raise property tax rates, and (4) it shifts money in the state's education finance system away from its main objective, which is to ensure that every child has a sound, basic education.

Policies to mitigate STAR's third flaw have been passed in recent years. Most importantly, a homeowner's STAR payment now cannot increase by more than 2 percent per year. This provision significantly lowers homeowners' incentive to raise property tax rates.[2] Moreover, homeowners with incomes above $500,000 are no longer eligible for the STAR exemptions, which is a minor improvement in STAR's second flaw.

A property tax exemption such as STAR exempts the first $X of a homeowner's property value from the property tax. A circuit breaker has a different design. It calculates property taxes as a share of income. When this share exceeds a certain value, say S, then the taxpayer receives a rebate from the state. This rebate equals a percentage, say P, of the difference between the taxpayer's property tax payment, T, and the product of S and their income, Y. [3] In the case of the Cuomo proposal, S equals 6 percent and P equals up to 50 percent. In other words, the proposed rebate equals up to 50 percent of the property taxes that exceed 6 percent of a taxpayer's income.

To be more specific, the provisions of this circuit breaker depend on household income. As shown in the following table, the 50 percent rebate only applies for taxpayers with incomes

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[1] For details see Cuomo, Andrew M. 2015. "2015 Opportunity Agenda: Restoring Economic Opportunity," Press Release, January 14. Available at:
https://www.governor.ny.gov/news/2015-opportunity-agenda-restoring-economic-opportunity .

[2] In addition, New York State now has a limit on property tax levy increases for all local governments. Although this limit is poor public policy (see My June 2012 column), it does have the advantage of making it more difficult for school districts to raise property taxes in response to the STAR incentives.

[3] In symbols, the rebate equals zero if T < S*Y, where * indicates multiplication, and P*(T – S*Y) if T > S*Y.

below $75,000. Taxpayers with incomes above $250,000 are not eligible for the rebates, and the rebate amounts are capped.

Income Brackets	Threshold (Property taxes as a percent of income)	Relief (Percentage applies to the amount above threshold)	Maximum Relief Amount
Less than $75,000	6%	50%	$2,000
$75,000 - $150,000	6%	40% - 50%	$1,500 - $2,000
$150,000-$250,000	6%	15% - 40%	$1,000 - $1,500

A circuit breaker has the same main advantage as STAR: it lowers the burden of property taxes on the homeowners with the least valuable homes. Indeed for many taxpayers the resulting distribution of tax burdens by homeowner income within a district is similar under the two policies. This equivalence is shown in Figures 1 and 2. Figure 1 shows the impact of (somewhat simplified versions of approximately equal cost) of both policies on a taxpayer's effective property tax rate, which is assumed to be 2 percent in this figure if neither policy were in place. Comparing the gray line and the green line, which refer to taxpayers with below-average ratios of house value to income, shows that the effects of the two approaches are similar.[4] (I will return to the other lines shortly). Figure 2 provides an alternative comparison of the two approaches, namely their implications for property taxes as a percentage of income. In this case the gray and green lines are almost identical.

Governor Cuomo's circuit-breaker proposal differs from STAR in several important ways, however. First, it applies to all property taxes, not just to school property taxes. This feature magnifies the fourth flaw of STAR by using state funds that could be directed toward education finance reform to relief of non-school taxes.[5] Non-school property tax relief is a reasonable objective, but it should not be given priority over the creation of an education financing system that meets the principles endorsed by the New York Court of Appeals. Moreover, it makes no sense to add a second major property tax break with a price tag of almost $2 billion when the education funding problems remain unresolved.[6]

Second, this circuit breaker includes renters and therefore does not share STAR's first flaw.[7] Providing property tax relief to renters is difficult, because it is difficult to determine the extent to which landlords are able to pass the property tax on to tenants.[8] The Cuomo proposal assumes that a renter's property tax payment equals 13.75 percent of her rent. This approach is a big improvement over the no-renters approach of STAR. As shown in the appendix to this column, the plausible view that the property tax rate on rental housing is 2 percent and renters pay half of the property tax on their apartments implies (using a simple model) that property taxes equal

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[4] For readers of black and white versions: the gray line has tilted squares and the green line has large dashes.
[5] This proposal also rules out rebates for households in communities that override the property tax levy limit. This applies to owners and renters. In my view, this is a heavy handed treatment of local voters.
[6] See my November 2013 column.
[7] Renters could, of course, be added to STAR. The distinction here is between specific policies, not between exemptions and circuit breakers in general.
[8] For one attempt to estimate the extent of this shifting, see Robert J. Carroll, and John Yinger, "Is the Property Tax a Benefit Tax? The Case of Rental Housing," *National Tax Journal* 47 (2) (June 1994): 295-316.

12.5 percent of rent, which is close to the figure in this proposal. The main problem is that this percentage is not adjusted for the local property tax rate. In the above example, property taxes go up to 16.67 percent of rent when the local property tax rate is 3 percent. It would be often difficult, of course, to calculate the effective tax rate for all the overlapping jurisdictions in which one taxpayer lives, so the approach in this proposal strikes me to be a reasonable compromise.

Third, the Cuomo circuit breaker does not include any provision remotely like the sales price differential factor, which unfairly boosts the exemptions in high-wealth counties.[9] Indeed, one of the appealing features of a circuit breaker is that it gives rebates to high-income people only if their property taxes are disproportionate to their income (and, in the case of the Cuomo proposal, if their income is below a fixed limit). There is a price to this equity gain, however, namely, that taxpayers who spend a relatively high share of their income on housing are rewarded above others. As scholars have pointed out,[10] it really does not make sense to reward people who have freely chosen to buy more expensive houses than other people with the same income.[11] Moreover, this feature of a circuit breaker lowers the post-tax price of housing for many people and thereby encourages them to spend more on housing. The United States already heavily subsidizes homeownership and, to a lesser degree, rental housing; another subsidy is difficult to justify.[12] It should be pointed out, however, that these problems can be minimized by placing limits on the rebate amounts, such as those in the Cuomo proposal.

The link between a circuit breaker and spending on housing is illustrated by the blue and orange lines in Figures 1 and 2.[13] These lines apply to a taxpayer with a high house value (or rent) relative to income. A comparison of the blue lines (for a circuit breaker) with the orange lines (for an exemption) indicates that households of this type receive a much larger benefit from a circuit breaker than from an exemption—and a much larger benefit than the other households with a circuit breaker.

Fourth, a circuit breaker not only lowers the price of post-tax housing, it also lowers the tax price of public services for people who receive the rebate. With a rebate percentage of 50 percent, as in the Cuomo proposal, people who receive the rebate face a price of public services that has been cut in half. The main difference between the circuit breaker and STAR is that fewer people face these altered incentives with the circuit breaker. With STAR, all homeowners who are income-eligible face a lower price for public education, whereas the circuit breaker only lowers the price of public services for voters whose property taxes exceed 6 percent of their income. Voters in the latter category are not likely to be a majority in any communities.[14]

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[9] See my May 2012 column.

[10] See, for example, Peter S. Fisher, "Adjustments for Household Size in Property Tax Circuit-Breaker Programs," *National Tax Journal* 33 (2) (June 1980): 161-171.

[11] Some of the people in this category may be empty nesters. New York already provides subsidies, such as enhanced STAR, to elderly homeowners; further subsidies are not needed.

[12] An overview of housing subsidies is provided by Alex F. Schwartz, *Housing Policy in the United States*, 3rd Edition, New York: Routledge, 2015.

[13] The blue lines have small dashes and the orange lines are marked with squares.

[14] In addition, the property tax levy limits greatly weaken these price incentives with a circuit breaker—as they do with STAR. See footnote 2.

Overall, one could make the case that New York State should replace the STAR exemptions with a circuit breaker similar to the one Governor Cuomo has proposed. This step would maintain property tax relief for the neediest homeowners, extend relief to renters, and eliminate severe inequity caused by STAR's sales price differential factor. The main disadvantage of this step is that it would unfairly subsidize some households who choose to spend a relatively high share of their income on housing.

Alternatively, the state could restrict the Cuomo proposal to renters, which would lower the cost of the program substantially and compensate for one of the main flaws of STAR.

In my view, however, it does not make sense to implement a circuit breaker on top of STAR. New York State is not living up to its constitutional responsibility to provide a sound, basic education to all of its students, and in particular, it is not providing big cities and other poor districts with the resources they need to meet this standard. The State is already devoting well over $3 billion to providing property tax relief through STAR. It would be unconscionable to use almost $2 billion more for adult tax relief when far more than that is needed to meet the State's constitutional obligations to its children.
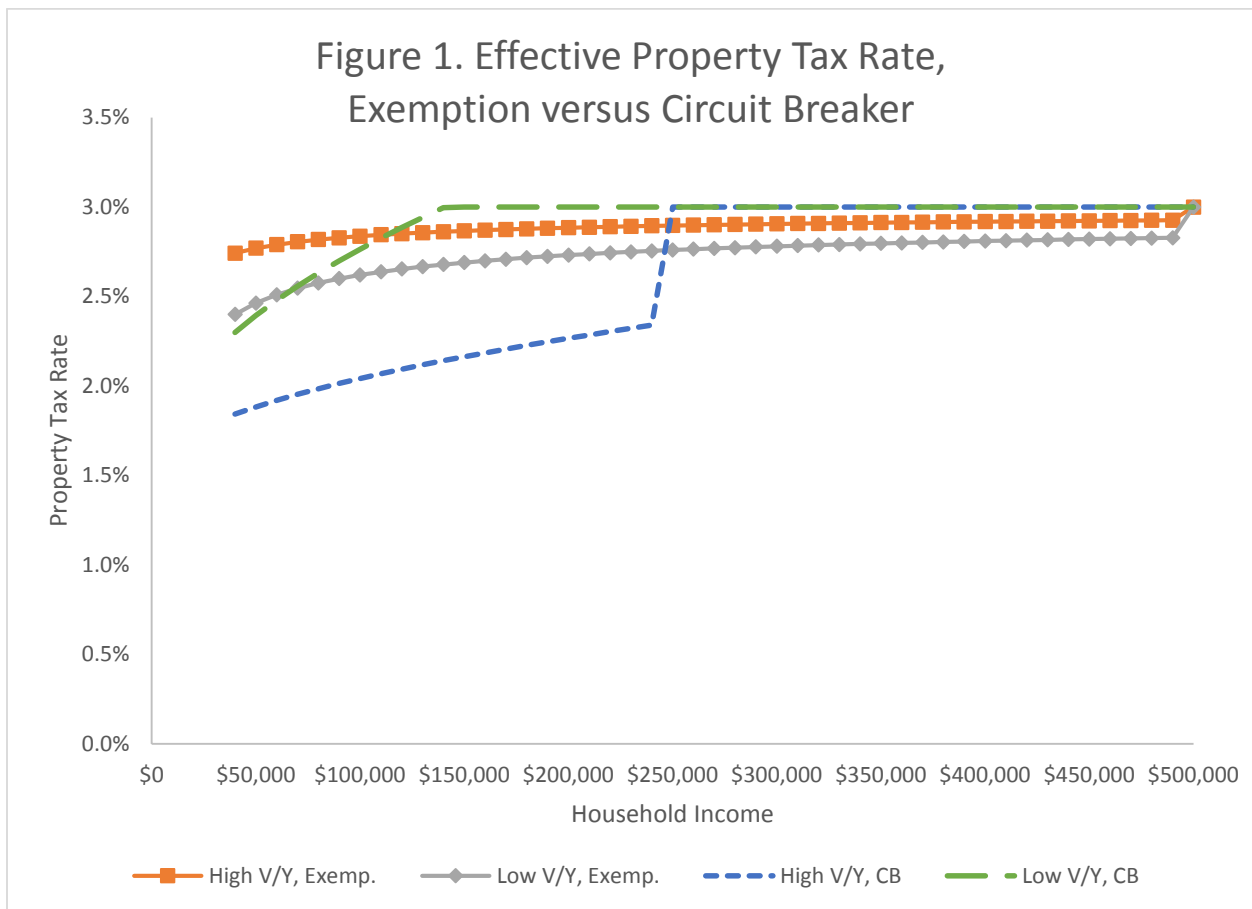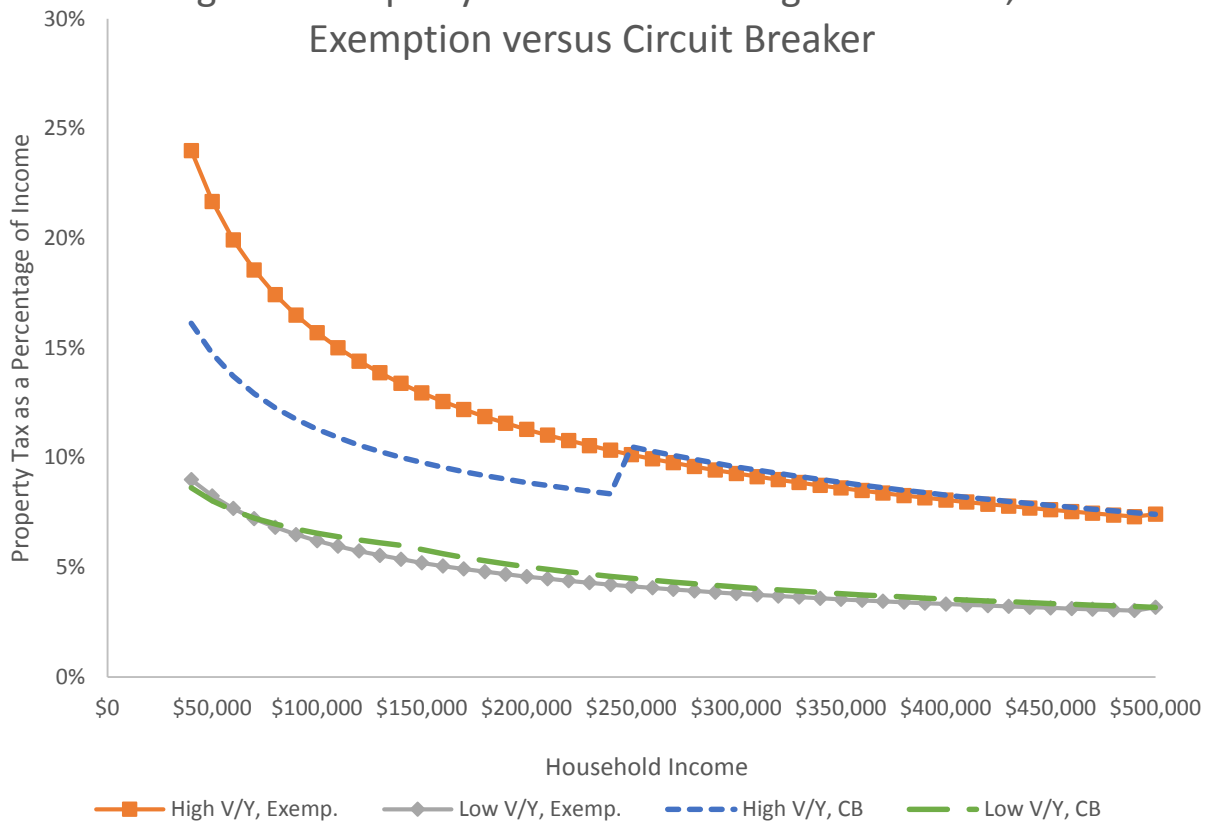

Figure 1. Effective Property Tax Rate, Exemption versus Circuit Breaker

Figure 2. Property Tax as a Percentage of Income, Exemption versus Circuit Breaker

Appendix: Property Taxes as a Share of Rent

This appendix presents a simplified (but hopefully illuminating) analysis of property taxes as a share of rent.

The value of an apartment building is the present value of the stream of net benefits from owning it. With a constant stream of rents (in real terms), a long lifetime for a building, and (to start with), no property taxes, the value of an apartment building can be closely approximated by the annual flow of rents divided by a capitalization rate, which indicates the opportunity cost of investing in rental housing. In symbols, $V = R/i$, where V is market value, R is pre-tax rent, and i is the capitalization rate.

Property taxes affect this equation in two ways. First, they are an expense to the landlord. Second, they are, to some degree, shifted into rents. Let t be the effective property tax rate, which is defined to be the tax payment, T, as a share of the market value of property, V. Thus T, which is an annual expense for the owner, equals tV. In addition, let α be the share of property taxes that are shifted into rents. Then the value of an apartment building equals the present value of pre-tax rents minus total property taxes plus the property taxes paid by tenants in the form of higher rent. In symbols,

$$V = \frac{R}{i} - \frac{tV}{i} + \frac{\alpha tV}{i} \ .$$

Note that the total rent paid by tenants, say R^*, equals $R + \alpha\, tV$. Solving the above equation for V, we find that

$$V = \frac{R}{i + (1-\alpha)t} \ .$$

This result implies that

$$T = tV = \frac{tR}{i + (1-\alpha)t}$$

and that tenants' tax payments, say T^*, can be written

$$T^* = \alpha tV = \frac{\alpha tR}{i + (1-\alpha)t} \ .$$

Now dividing tenant's tax payments by total rent and simplifying, we discover that

$$\frac{T^*}{R^*} = \frac{\alpha t}{i + t} \ .$$

This ratio is the one set at 13.75 percent in the Cuomo circuit breaker proposal. What are the implicit assumptions behind this value? Suppose half of the property tax is shifted onto renters (i.e., $\alpha = 0.5$), that the opportunity cost of investing in rental housing ($= i$, which includes foregone returns from other investments, maintenance, and depreciation) is 6 percent per year, and that the effective property tax rate (t) is 2 percent, which is a common rate in New York State. Then this formula indicates that property taxes will be 12.5 percent of rents. These assumptions are therefore close to the implicit ones behind the percentage in the Cuomo proposal.

Note however, that even if one makes the reasonable assumption that α and i are constant across communities, the value of t certainly varies; some jurisdictions have much higher property tax rates than others! For example, the ratio of T^* to R^* goes up to 16.67 percent when $t = 0.03$ and to 20 percent when $t = 0.04$. Overall, the Cuomo proposal is a reasonable way to account for the possibility of tax shifting onto tenants, but it does not account for the fact that property taxes are likely to be a higher share of rents in higher-tax locations.