The Death and Life of the State and Local Tax Deduction

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Abstract

The December 2017 U.S. tax law imposed stringent limits on the deduction for state and local taxes (SALT). But it would be premature to publish SALT’s obituary just yet. For one thing, the limits on SALT in the new tax law expire after December 31, 2025. SALT is not dead—it’s just cryogenically frozen. And more immediately, several states are poised to enact laws that could restore the SALT deduction for some of their residents and extend it to others who never claimed the deduction before. Ironically, the effort to kill the SALT deduction as part of the December 2017 tax law may have the unintended consequence of spurring states to enact reforms that effectively expand the deduction’s scope.

This essay considers SALT’s history and its future. It casts the recent rollback of SALT as the culmination of a seven-decade trend of successive SALT limitations, which even before 2017 had put the SALT deduction effectively out of reach for more than two-thirds of the taxpaying public. It goes on to outline the strategies that states and their subdivisions can pursue to preserve—and in some cases expand—the ability of their citizens to pay for state and local government-provided goods and services with federally deductible dollars. I conclude with reflections on what these state strategies tell us about the normative justification for the SALT deduction in the first instance. The fact that the SALT deduction can be so readily reengineered is—I argue—a powerful indication that the deduction is in fact consistent with deeply rooted elements of the Internal Revenue Code.

* Assistant Professor, University of Chicago Law School. Thanks to Michael Christ for excellent research assistance. Note: As an upper-middle-income homeowner in a high-tax state, I am undeniably a SALT beneficiary. And as an informal adviser to officials in New York and California who are trying to reengineer their state tax codes so as to restore the benefits of SALT to their constituents, I have a political/professional interest in SALT’s revival. So take what I say with a grain of . . . well, sodium chloride puns are inevitable and only sometimes intentional in the SALT debate.
More than a century and a half after its birth, the federal income tax deduction for nonbusiness state and local taxes has shrunk to a shadow of its former self. While a series of legislative enactments over the last several decades had already chipped away at the deduction’s scope, the December 2017 tax law struck the biggest blow to the deduction yet. For the next eight years, only about a tenth of taxpayers will be able to derive any benefit from the deduction for state and local taxes (SALT). And those that still claim the SALT deduction will run into a $10,000 cap that in many cases will severely limit the benefit they can claim.¹

But it would be premature to publish SALT’s obituary just yet. For one thing, the limits on SALT in the December 2017 tax law expire after December 31, 2025. SALT is not dead—it’s just cryogenically frozen. And more immediately, several states are poised to enact laws that could revive the SALT deduction for their residents in part or in full. Indeed, a proposal in New York to shift to a state-level payroll tax would make the SALT deduction available to millions of workers who could not claim any SALT deduction under the pre-2018 regime. Ironically, the effort to kill the SALT deduction as part of the December 2017 tax law may have the unintended consequence of spurring states to enact reforms that effectively expand the deduction’s scope.

This essay considers SALT’s history and its future. It casts the recent rollback of SALT as the culmination of a seven-decade trend of successive SALT limitations, which even before 2017 had put the SALT deduction effectively out of reach for more than two-thirds of the taxpaying public. But the gradual erosion of SALT, I argue, is on the brink of reversal: state and local governments now have the power to restore the SALT deduction to its former glory. Specifically, states can adopt three strategies that will allow their residents to pay for public goods and services through federally deductible dollars notwithstanding the new tax law’s limits. First, states can reduce their reliance on personal income taxes and collect additional revenue through employer-side payroll taxes that remain fully deductible under federal law. Second, states can use charitable contribution credits to encourage donations to state and local agencies that supplement—and in some cases replace—revenue from income and property taxes. Third, states can impose entity-level taxes on partnerships, S corporations, and sole proprietorships that are coupled with offsetting member-level credits. All three of these strategies, I argue, can be implemented without insuperable administrative hassles, and each approach—if carried out carefully—has a strong likelihood of passing muster with the Internal Revenue Service (IRS) and the courts.

From a normative perspective, the return of the SALT deduction is probably for the better. Principles of vertical equity, horizontal equity, and interstate equity do not support the new tax law’s rollback of the deduction. Moreover, deductibility of state and local taxes is—I argue—broadly consistent with the consumption tax principles that underlay much of the Internal Revenue Code prior to 2017 and that animate even more of the tax law today. Because the bulk of state and local tax expenditures go toward education and health care, the appropriate tax treatment of SALT depends in large part on how one thinks the Code should handle these items. Against a baseline that allows an immediate deduction for physical capital and exclusion (equivalent to full deduction) for market-provided health care, it stands to reason that investments in human capital and health care that are channeled through state and local governments would merit deduction too. And the differential treatment of charitable contributions and SALT payments under the new tax

¹ See I.R.C. § 164(b)(6).
law creates an unjustified bias against the state and local civic institutions that “our Federalism” supposedly extolls.

This essay proceeds in three parts. Part I briefly summarizes the origins and evolution of the SALT deduction. Part II examines the principal arguments on both sides of the SALT debate and seeks to expose the weakness of the case against SALT. Part III outlines the strategies that states and their subdivisions can pursue to preserve—and in some cases expand—the ability of their citizens to pay for state and local government-provided goods and services with federally deductible dollars. I conclude with reflections on what these state strategies tell us about the normative justification for the SALT deduction in the first instance. The fact that the SALT deduction can be so readily reengineered is—I argue—a powerful indication that the deduction is in fact consistent with deeply rooted elements of the Internal Revenue Code.

I. A Brief History of the SALT Deduction

The deductibility of state and local taxes has been a feature of the federal income tax throughout almost its entire history. The first federal income tax statute, the Revenue Act of 1861, allowed a deduction for “all national, state, or local taxes assessed upon property, from which income is derived,” and Congress extended the deduction to nonbusiness state and local taxes four years later. When the federal income tax was resurrected briefly in 1894, the deduction for all state and local taxes was revived as well. The deduction reemerged in the Revenue Act of 1913, the first federal income tax statute enacted after ratification of the Sixteenth Amendment. It has remained ever since, though as we shall soon see, successive federal tax reform efforts have limited the deduction’s scope.

A second significant development was the advent of the alternative minimum tax (AMT). Introduced in 1969, the AMT has become an increasingly important element of the federal tax system over time. The percentage of tax returns showing liability under the AMT has climbed from around 0.1% in 1990 to nearly 2.9% in 2014 (the most recent year for which data is available). The primary effect of the AMT on taxpayers who are subject to it is to reduce the value of the SALT deduction. Note that the AMT does not eliminate the value of the SALT deduction for taxpayers who are subject to it, even though state and local taxes are not deductible for AMT purposes. This is because taxpayers who are subject to the AMT still generally pay less than they would have if their liabilities had been calculated under the normal tax without a SALT deduction.

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4 Act of Aug. 27, 1894, ch. 349, § 27, 28 Stat. 553.
6 See Turnier, supra note __, at 267-69.
7 Id.
For these taxpayers, the AMT diminishes the value of the SALT deduction—but not all the way down to zero.\(^8\)

Third, Congress has repeatedly restricted the types of taxes for which individuals can claim the SALT deduction. The Revenue Act of 1964 limited the deduction to taxes on income, property, general sales, gasoline, and motor fuel, thus disallowing deductions for taxes on motor vehicle licenses, alcohol, and cigarettes (among others).\(^9\) The Revenue Act of 1978 eliminated the deduction for state and local taxes on gasoline and motor vehicle fuel,\(^10\) and the Tax Reform Act of 1986 dispensed with the deduction for sales taxes entirely.\(^11\) From then until 2004, the status quo was that nonbusiness state and local income and property taxes were deductible, while nonbusiness sales taxes were not.

The American Jobs Creation Act of 2004 changed the SALT status quo in one important way: it gave taxpayers the opportunity to deduct state and local income taxes or state and local sales taxes (but not both).\(^12\) The 2004 law also instructed the IRS to prescribe tables that allow taxpayers to estimate their state and local sales taxes based on their adjusted gross income, filing status, number of dependents, and the general sales tax rates in their state and locality.\(^13\) Though the option to deduct state and local sales taxes was initially enacted as a temporary measure and set to expire at the end of 2005,\(^14\) Congress has extended the option ever since, finally making it permanent at the end of 2015.\(^15\)

Significantly, the treatment of sales taxes under section 164 means that taxpayers cannot deduct all state and local taxes paid. Thirty-nine states impose taxes on both income and general

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\(^8\) To illustrate (using a publicly available tax return as an example): Tim Kaine and Anne Holton reported taxable income of $253,901 in 2014—including a $21,567 deduction for state and local taxes in that calculation. Their liability under the normal tax would have been $59,409; their tentative minimum tax for AMT purposes was $63,606; and so they paid the latter (larger) amount. But while the SALT deduction played no role in the calculation of their $63,606 liability under the AMT, they nonetheless received a benefit from the SALT deduction. That is because in the absence of the SALT deduction, their taxable income would have been $275,468, and their liability under the normal tax would have been $66,807. Another way of thinking about this is that while they would have received a SALT deduction worth $7,147 (33% times $21,657) under normal tax principles, while instead they received a benefit worth $3,201 (the difference between their liability under normal tax principles and under the AMT). That is, the AMT reduced the value of the SALT deduction to the Kaines by roughly 55%, not by 100%. See Tax Analysts, Tax History Project: Presidential Tax Returns http://www.taxhistory.org/www/website.nsf/web/presidentialtaxreturns (last visited Aug. 30, 2017) (follow link for Vice Presidential Candidate Tim Kaine’s 2014 return).


\(^10\) Pub. L. No. 95-600, § _, 92 Stat. _.


\(^12\) Pub. L. No. 108-357, § _, 118 Stat. _ (codified at I.R.C. § 164(b)(5)).

\(^13\) Id. § _, 100 Stat. _ (codified at I.R.C. § 164(b)(5)(H)).

\(^14\) Id. § _, 100 Stat. _.

sales, meaning that taxpayers will lose the ability to deduct one or the other. The only exceptions are Delaware, Montana, New Hampshire, and Oregon, which have income taxes but not general sales taxes; Florida, Nevada, South Dakota, Texas, Washington, and Wyoming, which have general sales taxes but not income taxes; and Alaska, which has neither an income tax nor a general sales tax (though some localities impose sales taxes of their own). Yet all of those states have selective sales taxes of some sort for which no deduction is allowed (e.g., taxes on alcoholic beverages, amusements, gambling, insurance premiums, motor fuels, tobacco, and utilities). Thus, there is no state in which taxpayers have the option to deduct all state and local taxes paid.

The introduction of the little-understood Pease provision in 1991 placed further limits on the SALT deduction’s value. When it applies, the Pease provision—also known as the overall limitation on itemized deductions—drives a wedge between the marginal rate and the rate at which deductions can be taken for taxpayers with adjusted gross income above a certain threshold ($261,500 in 2017 for single taxpayers, $313,800 for married couples filing jointly). For taxpayers in the highest bracket in 2017, the effect was to increase the top marginal rate from 39.6% to 40.8% while still allowing deductions only at the lower 39.6% rate. This 1.2 percentage point increase is on top of Medicare taxes, which raise the top marginal rate for high-income households by as much as 3.8 percentage points without affecting the rate at which deductions can be taken. The Pease provision was in force from 1991 to 2009, suspended from 2010 to 2012, restored from 2013 to 2017, and now on hold from 2018 to 2025, after which it is set to spring back to life.

The December 2017 tax law—the legislation once known as the “Tax Cuts and Jobs Act”—places the most stringent limits on the SALT deduction yet. While the “Unified Framework” for tax reform agreed to by the White House and congressional leaders in late September 2017 would have eliminated the SALT deduction entirely, the final bill retained the SALT deduction but imposed a $10,000 cap ($5,000 for taxpayers with married-filing-separately status). Significantly, the new $10,000 limit applies only to state and local property, income, and sales taxes. Other taxes incurred in the course of a trade or business remain deductible in full.

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16 See Julie Garber, State Tax Chart, The Balance (Sept. 8, 2016), https://www.thebalance.com/state-tax-chart-3505461 New Hampshire’s income tax applies only to interest and dividends, not to salaries and wages. Tennessee also has an income tax that applies only to interest and dividends.
18 See I.R.C. § 68.
19 See I.R.C. §§ 1411, 3101, 3111.
20 The short title provision of the tax law was eliminated from the final legislation after the Senate Parliamentarian concluded that the provision violated the upper chamber’s Byrd Rule, which bars provisions in budget reconciliation bills that do not affect revenue or outlays. See Ellen P. Aprill & Daniel J. Hemel, The Tax Legislative Process: A Byrd’s Eye View, 81 Law & Contemp. Probs. (forthcoming 2018), https://ssrn.com/abstract=3116973 (manuscript at __).
II. Easy on the SALT?

While the December 2017 tax law has drawn new attention to the SALT deduction, the debate over the federal income tax treatment of state and local tax payments has been a topic of controversy among scholars and policymakers for decades. This part articulates and evaluates the principal arguments for rolling back the SALT deduction, concluding that the case against SALT is shaky at best.

A. Broadening the Base?

One motivation for rolling back the SALT deduction as part of the December 2017 tax law was to broaden the tax base so that Congress could lower rates across the board. As the House Republicans’ tax reform blueprint emphasized, “carve-outs reduce tax revenue,” which, “in turn, typically requires increases in marginal rates to make up for lost revenue.” When marginal rates are higher, individuals are more likely to choose leisure over labor and less likely to make new investments. On this view, repealing the SALT deduction and using the resulting revenue to lower marginal rates would unleash economic growth. I will refer to this argument as the base-broadening argument.

The problem with the base-broadening argument as applied to the SALT deduction is that the deduction itself affects the combined federal-plus-state marginal tax rate on labor and capital income for the households that claim it. Eliminating the SALT deduction and using the resulting revenues to reduce federal tax rates across the board has the effect of lowering the combined federal-plus-state marginal rate for households in low-tax states while raising the combined federal-plus-state marginal rate for households in high-tax states. The likely net effect is to increase the total deadweight loss of taxation—contrary to the objective behind base-broadening.

In an Appendix, I present a rudimentary model that illustrates the point more formally. I assume that labor supply is unit elastic and that the burden of taxation falls entirely on labor (which is assumed to be immobile). The model involves two states with equal populations: one state (State X) that imposes a 10% income tax, and another state (State Y) that imposes no income tax. The federal tax rate is 40% with a SALT deduction, meaning that the combined federal-plus-state marginal rate in State X is 46% (i.e., 40% federal plus 10% state minus 4% for the SALT deduction) and the combined rate in State Y is 40% (i.e., 40% federal with no state addition).

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Under these conditions, I show that repealing the SALT deduction reduces total labor output by approximately 0.56% and increases deadweight loss by approximately 2.31%.

This basic result holds so long as the price elasticity of labor supply in high-tax states is roughly equal to the price elasticity of labor supply in low-tax states. It is concededly possible that tax-insensitive individuals migrate to high-tax states (State X in the running example) while tax-sensitive individuals sort to low-tax states (State Y), in which case cuts in the effective tax rate in State Y may do more to spur labor output than tax hikes in State X would do to dampen. The burden on those advancing the base-broadening argument for SALT repeal is to show that the difference in elasticities is sufficient to justify an intervention that would widen the gap between effective rates in high-tax and low-tax states. Until then, the base-broadening argument for SALT repeal should be considered questionable at best.

The same analysis that applies to the deduction for state and local income taxes also applies to the deduction for state and local sales taxes, because the sales tax deduction—as implemented—is based on income. There is, however, one significant category of state and local taxes to which the base-broadening argument for SALT repeal does apply: state and local property taxes on owner-occupied homes. The deduction for state and local property taxes does not reduce the combined federal-plus-state marginal rate on labor or capital income for any taxpayer, and so repealing the deduction for property taxes and using the revenue to reduce marginal rates across the board would be consistent with the intuition underlying prescriptions for base-broadening, rate-lowering tax reform.

Note, though, that the deduction for state and local property taxes on owner-occupied homes has historically accounted for less than one-third of the federal tax expenditure associated with the SALT deduction. Insofar as the base-broadening argument supports SALT repeal at all, it would support only the repeal of the deduction for state and local property taxes. And even that step—repeal of the deduction for state and local property taxes on owner-occupied homes—would seem to be in tension with other elements of the December 2017 tax law. The law largely retained the deduction for home mortgage interest on the view that the deduction promotes homeownership, which in turn “strengthen[s] civil society.” But the deduction for state and local property taxes on owner-occupied homes promotes homeownership as well—and unlike the home mortgage interest deduction, which delivers a larger benefits to recent homebuyers who still have large mortgage loan balances, the deduction for state and local property taxes on owner-occupied homes rewards homeowners who remain a stable presence in their communities. Preserving the mortgage

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24 Taxpayers who claim the itemized deduction for sales taxes generally use a calculator that estimates their sales taxes paid based on location, income, and household size. See Internal Revenue Serv., Sales Tax Deduction Calculator, https://www.irs.gov/individuals/sales-tax-deduction-calculator (last updated Nov. 28, 2016).

25 The Joint Committee on Taxation’s expenditure estimate for the deduction for state and local real property taxes is $36.4 billion for fiscal year 2018; the expenditure estimate for the deduction of other nonbusiness state and local government taxes is $74.1 billion. Staff of the J. Comm. on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2016-2020, at 32, 40 tbl.1 (Jan. 30, 2017).

26 Unified Framework, supra note 21, at 4.
interest deduction while repealing the deduction for state and local property taxes on owner-occupied homes reflects an incoherent approach to the promoting the positive externalities (arguably\(^27\)) associated with homeownership.

### B. Vertical Equity

A second set of arguments against the SALT deduction rests on notions of vertical equity. High-income households pay more in state and local taxes and are more likely to itemize deductions on their federal returns; unsurprisingly, the benefits of the SALT deduction flow largely to wealthy. Indeed, according to the U.S. Treasury Department, households in the top percentile of the income distribution claimed 37.1% of all SALT deduction benefits in 2017, and households in the top decile claimed 71% of SALT deduction benefits.\(^28\)

One might therefore think that the rollback of the SALT deduction would reduce inequality on an after-tax basis—that is (to use one common measure of inequality), it would make the bottom nine deciles better off relative to the top decile and the top percentile. Yet that intuition is not necessarily accurate if repeal comes coupled with rate reductions across the board (as it did in December 2017). That is because the share of individual income taxes paid by households in the top percentile and top decile is even larger than the share of SALT deduction benefits that those groups claim: according to Treasury, households in the top percentile of the income distribution paid 44.9% of all individual income taxes in 2017, and households in the top decile paid 80.9%.\(^29\) The groups that benefitted the most from the SALT deduction were also the groups that benefit the most from the rate reductions that rollback of the SALT deduction effectively funds.

In a recent article, Kyle Rozema and I estimate the distributional effects of repealing the pre-2018 SALT deduction and using the resulting revenues to reduce taxes across the board. We find that the distributional consequences are highly sensitive to the form of the accompanying tax cut. One of the scenarios we model is as follows: the SALT deduction is repealed, all households calculate their tax liability without the SALT deduction, and the additional revenue from SALT repeal is rebated to households in proportion to their tax liability. We find that this revenue-neutral repeal of the SALT deduction increases after-tax income inequality: on the whole, the bottom nine deciles pay more while the top decile and top percentile pay less.\(^30\) The feature of the federal


income tax system driving this result is the fact that high-income households claimed a disproportionate share of pre-2018 SALT deduction benefits but paid an even greater share of all individual income taxes.

There are, to be sure, scenarios in which repeal of the SALT deduction might reduce after-tax income inequality. For example, if the additional revenue from repealing the SALT deduction were rebated to taxpayers on a per-capita or per-household basis, then repeal would tend to make lower-income households better off and higher-income households worse off, at least on a static basis. But that conclusion comes with two significant caveats that should give pause to those who oppose SALT on vertical equity grounds.

First, the SALT deduction likely affects the size of state and local government. The deduction reduces the after-tax price of state and local government spending for taxpayers who claim the deduction. For a taxpayer facing a 40% marginal federal rate who can claim the SALT deduction, the after-tax price of an additional $1 of state and local government spending is 60 cents; without the deduction, the after-tax price of an additional $1 of state and local government spending for the same taxpayer is a full $1. As a general matter, when the price of a good or service rises, people buy less of it. For that reason, we might expect that the rollback of SALT will cause voters to support cuts to state and local taxes. And indeed, several econometric studies find a relationship in the expected direction between the value of the SALT deduction and the amount of state and local government spending.31

Insofar as the SALT deduction affects the size of state and local government, the deduction delivers benefits to individuals and families that rely heavily on state and local government services. Those include students in K-12 public schools and at public universities, patients at state and municipal hospitals, enrollees in Medicaid and the Children’s Health Insurance Program, and recipients of various state public welfare programs. As Table 1 illustrates, nearly two-thirds of state and local government direct expenditures go toward public education, health and hospitals, and public welfare programs. These students, patients, and welfare recipients may not claim the SALT deduction themselves, but they are among the deduction’s indirect beneficiaries.

Table 1. State and Local Government Expenditures by Category, 2013-2014

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage of Direct General Expenditures (excluding general administration and interest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>36.6%</td>
</tr>
<tr>
<td>Elementary and Secondary</td>
<td>23.7%</td>
</tr>
<tr>
<td>Higher Education</td>
<td>10.9%</td>
</tr>
<tr>
<td>Other Education</td>
<td>2.0%</td>
</tr>
<tr>
<td>Public Welfare Vendor Payments (including Medicaid/CHIP)</td>
<td>17.8%</td>
</tr>
<tr>
<td>Health and Hospitals</td>
<td>10.3%</td>
</tr>
<tr>
<td>Public Safety</td>
<td>9.5%</td>
</tr>
<tr>
<td>Police</td>
<td>4.1%</td>
</tr>
<tr>
<td>Fire</td>
<td>1.8%</td>
</tr>
<tr>
<td>Corrections</td>
<td>3.0%</td>
</tr>
<tr>
<td>Other Public Safety</td>
<td>0.6%</td>
</tr>
<tr>
<td>Transportation</td>
<td>7.8%</td>
</tr>
<tr>
<td>Highways</td>
<td>3.5%</td>
</tr>
<tr>
<td>Airports</td>
<td>0.9%</td>
</tr>
<tr>
<td>Other Transportation</td>
<td>3.4%</td>
</tr>
<tr>
<td>Sewage and Solid Waste Management</td>
<td>3.0%</td>
</tr>
<tr>
<td>Housing and Community Development</td>
<td>2.0%</td>
</tr>
<tr>
<td>Parks and Recreation</td>
<td>1.5%</td>
</tr>
<tr>
<td>Other</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

Second, the SALT deduction differentially affects the after-tax price of state and local government spending. It does more to reduce the after-tax price for high-bracket itemizers than for lower-bracket taxpayers—and does nothing to reduce the after-tax price of state and local government spending for the two-thirds of taxpayers who claimed the standard deduction pre-2018. That, in turn, generates an incentive for states to structure their own tax systems so as to shift more of the tax burden onto higher-income households that pay a lower after-tax price. In this respect, the SALT deduction benefits lower-income households who do not claim the

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deduction, as it encourages states and localities to tax them less relative to higher-income itemizers.

In sum, the fact that higher-income households are more likely to claim large SALT deductions does not tell the full story of the deduction’s distributional impact. Once one considers the indirect as well as the direct beneficiaries of the SALT deduction, the distributional consequences of repeal become ambiguous. Accordingly, vertical equity supplies at best a weak argument against the deduction.

C. Horizontal Equity

Aside from the base-broadening and vertical equity concerns mentioned above, much of the debate over the SALT deduction has revolved around questions of horizontal equity. To concretize the issue: Imagine that State X imposes a 10% income tax and State Y imposes no income tax. Imagine, moreover, that Worker A in State X earns 100, while Worker B in State Y earns 100 and Worker C in State Y earns 90. If we want the federal tax system to treat similarly situated taxpayers similarly, does that mean Worker A should pay the same amount in federal taxes as Worker B (no SALT deduction), the same amount as Worker C (full deduction), or less than Worker B but more than Worker C (the partial deductibility status quo)?

The horizontal equity debate has gone on for decades without reaching a clear resolution. Three observations stand out. First, at least with respect to the deduction for state and local income taxes, the answer to the deductibility question matters little for horizontal equity among workers if labor is fully mobile. To see why, imagine a federal tax rate of 40% and a Worker W who can earn 100 pre-tax (60 after taxes) by working for a firm in tax-free State Y. Assume, moreover, that there is no difference in amenity levels between State X and State Y but that State X imposes a 10% tax. For a firm in State X to lure Worker W, it must offer him a wage such that he ends up at least as well off as in State Y (60 after taxes). With no SALT deduction, the offer must be at least 120, in which case Worker W will pay 12 in State X taxes and 48 in federal taxes, ending up with 60 on an after-tax basis. With a SALT deduction, the offer must be at least 111.11, in which case Worker W will pay 11.11 in State X taxes and 40 in federal taxes, ending up with 60 on an after-tax basis. Worker W is essentially indifferent as to whether there is or is not a SALT deduction: he ends up with 60 after taxes either way, and the SALT deduction only affects the cost to his employer.

Adding in amenity level differences complicates the arithmetic but does not alter the result. To illustrate: Assume that taxes in State X finance amenities that Worker W values at 5. For worker W to be indifferent between the job in State X and the job in State Y, the offer from the firm in State X must leave him with 55 on an after-tax basis (plus untaxed amenities worth 5 equals 60). With no SALT deduction, the offer must be at least 110, in which case Worker W will pay 11 in state taxes and 44 in federal taxes, leaving him with 55 on an after-tax basis. With a SALT deduction, the offer must be at least 101.85, in which case Worker W will pay 10.19 in state taxes and 36.67 in federal taxes, leaving him with 55 (rounded) on an after-tax basis (plus untaxed amenities worth 5 equals 60). The key point is that insofar as State X offers amenities that State Y does not, those amenity differences will be reflected in wage differences when labor is fully mobile.
To be sure, even with (indeed, especially with) full labor mobility, the SALT deduction affects the relative wealth of employers in State X and State Y. Firms in high-tax states benefit if the deduction is preserved; firms in low-tax states benefit if the deduction is repealed (assuming that the resulting revenues are used to cut federal rates across the board). However, horizontal equity supplies neither an argument for deductibility nor against: the principle of horizontal equity tells us that if two individuals are similarly situated pre-tax, then we should tax the two of them similarly as well, but a taxpayer’s pre-tax economic situation is itself endogenous to whether we allow a SALT deduction. A similar argument applies with respect to the deduction for property taxes: turning on or off the SALT deduction for property taxes affects prices of owner-occupied residential real estate in State X and State Y, but that difference is likely to be reflected in house prices. Horizontal equity does not supply a reason for favoring one policy over the other.\footnote{See Kaplow, supra note 22, at 454-56. To illustrate: Imagine two homes, one in State X and the other in State Y, both of which cost 100 in a tax-free world. Assume a risk-free rate of return of 10\% and that real estate is a risk-free asset. The user cost of living in either house is 10 per year (equal to the opportunity cost of capital, or the rate of return times the home price). Now imagine that State X levies a property tax of 1 per year and State Y levies no property tax. Assume that the federal tax rate is 40\%, that there is no deduction for state and local property taxes, and that there is no amenity-level difference resulting from the new tax. For a potential homeowner to be indifferent between the house in State X and the house in State Y, the price on the house in State X must fall from 100 to 90 (in which case the user cost of living in the State X house, 1 in property taxes plus a capital cost of 9, will equal the user cost of living in the State Y house). With a deduction for state and local property taxes, the after-federal-tax cost of the property tax bill on the house in State X falls from 1 to 0.6, and the potential homeowner is indifferent between a house priced at 94 in State X and a house priced at 100 in State Y (in which case the user cost of living in the State X house, 0.6 in tax-related costs plus a capital cost of 9.4, will equal the user cost of living in the State Y house).}

Second, if labor is immobile, then deductibility potentially affects horizontal equity among workers but not in a way that yields clear policy implications. Imagine that State X and State Y impose no income tax, that Worker A in State X and Worker B in State Y each earn 100, and that State X then imposes a tax of $t$ that funds amenities per capita of $a$. Worker A may now be worse off than Worker B (if the value of $a < t$) or may be better off than Worker B (if the value of $a > t$). Because of labor immobility, wages do not adjust to restore equality between Worker A and Worker B.

As a thought experiment, Louis Kaplow more than two decades ago proposed allowing a deduction for state and local taxes but then adding back to taxable income some estimate of $a$ (i.e., the value of amenities provided by subnational government).\footnote{See id. at 423-30.} Assuming that state and local taxes paid exceed amenities for higher-income households but not for lower-income households, such a scheme would lead to a partial deduction for higher-income households and additional taxable income for lower-income households. Recall, though, that most state and local government spending goes toward health care and education. Employer-provided health coverage is generally
excluded from income, so arguably, taxing lower-income residents of high-spending states on the value of the health care they receive from the state would generate an inequity between individuals who receive health care through state government and individuals who receive health care through their employer. Likewise, students who receive scholarships from nonprofit private schools generally are not taxed on the value of their education, so again, taxing students and their families on the value of the free public education they receive would arguably generate an inequity between public school students and their private school counterparts.

Third, underlying the horizontal equity debate over the SALT deduction is the question of why we care about horizontal equity in the first place. A plausible view is that our worry about horizontal equity is derivative of our concern about vertical equity. An additional dollar delivers greater utility to a poor person than to a rich one, and so transferring the dollar from the rich person to the poor person increases total welfare. Likewise, if two individuals have the same income (and, by hypothesis, the same marginal utility of income), then welfare is maximized by taxing the two of them the same. Put differently: If A and B have the same pre-tax income but A pays more in taxes, and the marginal utility of income is diminishing over income, then A’s marginal utility of income is greater than B’s; welfare can be enhanced by transferring dollars from B to A—which is to say, by shifting a portion of the tax burden from A to B. To decide who should be a transferor and who should be a transforee, we need a reasonably accurate measure of each individual’s marginal utility of income. The Internal Revenue Code’s system of inclusions, exclusions, deductions, and exemptions aims to do just that.

A focus on the marginal utility of income changes the terms of the debate over the SALT deduction. The question becomes not whether Worker A in State X who earns income of $i$, pays states taxes of $t$, and receives amenities of $a$ is better off or worse off than Worker B in State Y who earns income of $i$, pays no state taxes, and receives no amenities. Rather, the question becomes whether Worker A in State X who earns income of $i$, pays state taxes of $t$, and receives amenities of $a$ has a higher or lower marginal utility of income than Worker B in State Y who earns income of $i$, pays no state taxes, and receives no amenities. The answers to these two questions may differ because not all increases to utility diminish the marginal utility of income. Amenities provided by subnational governments may be substitutes for market consumption (in which case we might think that the marginal utility of income decreases over $a$) or may be complements to market consumption (in which case we might think that the marginal utility of income increases over $a$).

Consider, for example, the provision of police services. Arguably, police services function as a substitute for private security services that taxpayers would otherwise pay for out of pocket; taxpayers in jurisdictions with high-quality public policing therefore may have more disposable income available for (non-security) consumption, and so a lower marginal utility of income. But police services also can be complements to consumption insofar as they increase the value to individuals of market-purchased goods. A taxpayer might be more inclined to buy, say, a fancy sports car if the risk of theft or vandalism is low. Effective policing may expand and enrich the

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37 See I.R.C. § 106(a).
taxpayer’s menu of consumption possibilities, thus raising the marginal utility of income. From a welfarist perspective, the decision whether to allow a deduction for state and local taxes arguably depends not only on whether amenities ($a$) are greater than, equal to, or less than state and local taxes paid ($t$), but also on whether those amenities are substitutes for or complements to other goods and services.

The takeaway from this discussion is that even if labor is immobile, and even if the value of amenities provided by subnational government can be quantified, horizontal equity principles do not yield concrete implications for the deductibility of state and local taxes. Normative evaluations of the SALT deduction likely must rest on other grounds.

D. Interstate Equity

Another equity-related argument for repealing the SALT deduction emphasizes the fact that the deduction disproportionately benefits certain states. This observation is undeniably correct, but its normative implications are nonobvious. Many provisions of the Internal Revenue Code affect different states differently: the enhanced oil recovery credit benefits Texas more than Maine; the credit for solar energy aids sunny Arizona more than Washington State. There is almost certainly no good reason to believe that each provision of the Internal Revenue Code should affect each state the same.

Insofar as there is any value to interstate equity on a system-wide basis, however, the argument for repeal of the SALT deduction is shaky. This is because the states whose residents benefit the most from the SALT deduction are also the states with the largest negative balance of payments with the federal government (i.e., the states that pay the most in federal taxes relative to the federal spending they receive). For example, Connecticut, New York, and New Jersey rank first, second, and third (respectively) in terms of the median tax benefit that itemizers derive from the SALT deduction, and they also rank 49th, 48th, and 50th (again, respectively) in terms of the per capita net balance of payments with the federal government. While there are a few states that rank high in SALT benefits and net federal spending (e.g., Maryland and Virginia), and others that

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39 This point is related to—though not quite the same as—the classic Corlett-Hague tax rule, which holds that complements to labor should be taxed at a lower rate than complements to leisure. See W.J. Corlett & D.C. Hague, Complementarity and the Excess Burden, 21 Rev. Econ. Stud. 21 (1953). Some goods and services provided by state and local governments are labor complements (e.g., job training and commuter bus and rail lines); others are leisure complements (e.g., public parks). The Corlett-Hague rule may yield the recommendation that expenditures on state and local government be treated differently than other expenditures (either taxed at a lower rate if state and local taxes primarily fund the provision of labor complements, or taxed at a higher rate if state and local taxes primarily fund leisure complements). I will defer discussion of the actual uses of state and local tax dollars to Section III.1.
40 I.R.C. § 43.
41 I.R.C. § 48.
rank low on both dimensions (e.g., North Dakota), the overall trend—as Figure 1 illustrates—is that states that benefit more from SALT are also more likely to be net payors.\footnote{43}

**Figure 1. SALT Deductions vs. Balance of Payments\footnote{44}**

None of this is to suggest that the SALT deduction should be retained so that the balance of payments between states and the federal government does not become even more unequal. My own view is that the principle of interstate equity carries no normative force. What this does illustrate is that insofar as interstate equity is cited as an argument against the SALT deduction, the argument does no persuasive work.

\footnote{43}{See id.} \footnote{44}{See id.}
E. Neutrality

A final set of arguments around the SALT deduction focuses on the effect of the deduction on state and local government decisionmaking. Opponents of the deduction claim that (a) the deduction reduces the after-tax cost of goods and services provided by state and local governments relative to goods and services provided through market mechanisms, leading to excessive and inefficient provision of goods and services by states and localities; and (b) the deductibility of some but not all payments to subnational governments distorts the choice of revenue-raising instruments by states and localities. Neither argument provides a persuasive reason for repealing the deduction. To the contrary, neutrality arguments supply a robust defense of SALT.

1. State and Local Governments vs. the Market

Consider first the claim that the SALT deduction is non-neutral as between the provision of goods and services by state and local governments and the provision of goods and services via the market. The success of this neutrality argument depends on whether the relevant baseline is an income tax or a consumption tax. For most American households—whose primary investments are in their homes, their IRAs and 401(k) plans, and their life insurance policies—the federal tax system as it affects them already comes closer to a consumption tax than an income tax. The exclusion of net imputed rent and the $500,000 capital gains exemption for home sales lead to yield-exemption treatment for owner-occupied real estate, which—in light of the immediate deduction-yield exemption equivalence—conforms (more or less) to consumption tax principles. The immediate deduction for contributions to traditional IRAs and the exclusion for contributions to traditional 401(k) plans approximate a tax on income minus savings, which is to say, consumption. The nontaxation of “inside build up” in long-term life insurance policies is likewise consistent with consumption tax principles, though not with income tax principles. The decline of dividend yields on publicly traded stocks, the preferential tax rate on qualified dividends and capital gains, and the basis step-up for capital assets held at death all combine to drive the effective tax rate on equity investments down toward zero—even for stocks held in taxable accounts. And the December 2017 tax law furthers the shift toward a consumption tax by allowing businesses to claim an immediate deduction for capital expenditures other than land and structures for the next five years. This effectively transforms the tax on business income into a tax on income minus net savings, which is to say, a tax on consumption.

Identification of the baseline affects analysis of the SALT deduction in significant ways. Under an income tax, investments in human capital—like investments in physical capital—should probably be capitalized and then amortized over their useful lives. The useful life of a high school or college degree might approximate the working life of the degree holder. This might suggest that taxpayers should be able to deduct a portion of the cost of their education each year. Immediate

deduction for educational expenditures, however, would seem to be inconsistent with the capitalization-and-amortization principle underlying the income tax. Under a consumption tax, by contrast, parity between the tax treatment of physical capital and the tax treatment of human capital would require an immediate deduction for investments in human capital assets. This perspective would militate in favor of a deduction for state and local tax payments that go toward education.

The fact that the taxpayers claiming the SALT deduction are not always the same people as the students acquiring the relevant human capital does not change matters. Under the December 2017 law, A can claim an immediate deduction for an expenditure on physical capital and then transfer the physical asset to B, who would be taxed on income generated by the asset. Analogously, public financing of elementary, secondary, and higher education involves a large number of As (i.e., taxpayers) investing in the development of human capital, claiming immediate deductions, and transferring that human capital to a large number of Bs (i.e., public school and university students), who are then taxed on the resulting income (wages). State and local governments mediate thousands or (in some cases) millions of such transfers.

One response to this line of argument is that education—or, at least, higher education—“produces utility beyond an increase in future wages” (e.g., the joy of learning, campus social life, and lifelong friendships). Insofar as that is the case, then an immediate and full deduction for educational expenditures might not be appropriate under consumption tax principles. It is, however, often the case that capital expenditures will yield some collateral consumption benefit (e.g., the CEO may derive aesthetic pleasure from a refurbished corporate headquarters). Such collateral consumption benefits are usually not a reason to deny a deduction entirely.

The appropriate treatment of health care expenditures under a consumption tax is somewhat less certain than the appropriate treatment of educational expenditures. Insofar as good health enhances productivity, immediate deduction is consistent with consumption tax principles. The characterization of health care expenditures as productivity-enhancing investments is less compelling with respect to patients who are beyond working age, but states and localities play a secondary role to the federal Medicare program in funding health care for retirees.

Analysis of the SALT deduction as applied to health care spending by subnational governments also requires consideration of the treatment of health care spending elsewhere in the Internal Revenue Code. As noted above, employer-provided health care is generally excluded from income. This exclusion amounts to the largest single federal tax expenditure, amounting to approximately $173 billion for fiscal year 2018 (i.e., $62 billion more than the expenditure

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48 Each of these transfers would presumably fall below the $14,000-per-year threshold for the taxation of gifts. While many households pay more than $14,000 per year in state and local taxes, it is doubtful that they pay more than $14,000 per year per beneficiary.
associated with the SALT deduction).\textsuperscript{50} The new law also retains—and indeed expands—the itemized deduction for medical expenses paid out of pocket.\textsuperscript{51}

Insofar as subnational government revenues go toward health care expenditures, deductibility for state and local taxes establishes parity between the tax treatment of health care spending by states and localities, on the one hand, and the treatment of health care spending by employers, on the other. In both cases, the expenditure is deductible to the payor (i.e., the taxpayer or employer) and excluded from the income of the payee. Again, this is consistent with the characterization of health care spending as a human capital investment and the treatment of other capital expenditures under a consumption tax regime.

To be sure, the argument that educational and health care expenditures should be deductible under a consumption tax does not get us all the way toward justifying the SALT deduction. Other significant state and local government spending items include public safety (9.5%) and transportation (7.8%). As for expenditures on police and corrections, deductibility is not obviously inconsistent with consumption tax principles insofar as law enforcement is an expense of protecting physical and human capital from damage.\textsuperscript{52} As for transportation, highways and other infrastructure are complements to both labor and leisure: smoother roads make us more productive and also allow us easier access to beaches, parks, malls, and movie theaters. Neither a rule of full deductibility nor a rule disallowing deductibility would seem to be appropriate.

In sum, the claim that the SALT deduction distorts by allowing taxpayers to purchase goods and services from subnational governments with after-federal-tax dollars overlooks the fact that the goods and services purchased from subnational governments are very often goods and services for which taxpayers otherwise could claim deductions under consumption tax principles. Concededly, there is an element of consumption to expenditures on education, health care, law enforcement, and roads, just as there is often an element of consumption to capital expenditures more generally. At the same time, a rule disallowing deductibility would impose a higher effective tax rate on productivity-enhancing investments channeled through subnational government than on capital investments in the private sector. Leveling the playing field between subnational government and the private sector is thus a very weak argument for repealing the SALT deduction.

\textbf{2. Subnational Government vs. the Charitable Sector}

The analysis in the preceding subsection compared the tax treatment of (on the one hand) goods and services purchased through subnational government and (on the other hand) the tax treatment of similar goods and services purchased through market institutions. There is, of course, a third supplier of education, health care, and public goods more generally: the charitable sector.

\textsuperscript{50} See Staff of the J. Comm. on Taxation, supra note 25, at 37 tbl.1.  
\textsuperscript{51} An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018, Pub. L. No. 115-97, § 11027, 131 Stat. 2054, 2077 (2017) (amending I.R.C. § 213(f)) (temporarily lowering the income floor for the medical expense deduction from 10% to 7.5% through the end of 2018).  
\textsuperscript{52} Income tax principles would seem to support an immediate deduction for law enforcement expenditures just as surely as consumption tax principles, as the relevant expense is recurring.
Following state and local institutions, charities are the leading providers of elementary, secondary, and higher education. Charities also operate more than half of all hospitals in the United States.\textsuperscript{53} The tax treatment of contributions to these charitable institutions potentially influences the debate over the SALT deduction.

The House Republicans’ blueprint for tax reform promised to preserve the charitable contribution deduction. According to the blueprint, “Americans are generous people who want to help their neighbors in need,” and the tax system therefore should continue to encourage charitable giving through a deduction.\textsuperscript{54} Congressional Republicans never offered any rationale as to why “help[ing] . . . neighbors in need” through the charitable sector should lead to a deduction while doing the same through state and local government should not. Nonetheless, while the December 2017 law imposed a new cap on SALT deductions for itemizers, the legislation \textit{raised} the limit on the charitable contribution deduction for itemizers from 50 percent of adjusted gross income to 60 percent of adjusted gross income.\textsuperscript{55} Thus, the tax treatment of payments that go toward education, health care, and public welfare depends critically on whether those payments are channeled through charities or through civic institutions.

The non-neutral treatment of charitable contributions and SALT payments has important efficiency implications. Retaining the charitable contribution deduction while rolling back the SALT deduction encourages communities to favor charitable institutions over state and local governments as providers of education and health care even when state and local governments might be the more efficient providers of those services. An anti-distortion rationale would seem to suggest that both should be repealed or both should be retained. The differential treatment under the new status quo is difficult to justify.

\textbf{III. Will SALT Rise Again?}

Unsurprisingly, the SALT provisions in the December 2017 tax law have generated impassioned opposition from officials in high-tax states. In his January 2018 State of the State address, New York Governor Andrew Cuomo called the SALT rollback “an all-out direct attack on New York state’s economic future.”\textsuperscript{56} California Governor Jerry Brown was similarly unsparing in his criticism: Congressional Republicans, according to Brown, are “attacking the vital sinews of the American economy, and it’s really stupid.”\textsuperscript{57}

\textsuperscript{54} See Ryan et al., supra note 23, at 21.
In the immediate aftermath of the tax law’s passage, governors of several of the states hit hardest by the SALT rollback promised to file a lawsuit challenging the constitutionality of the $10,000 SALT cap. But any constitutional challenge to the new limits on the SALT deduction would face high hurdles. The Sixteenth Amendment grants Congress broad power to tax income “from whatever source derived,” and the amendment explicitly contemplates that an income tax may have differential effects across states. The Supreme Court, for its part, has said time and again that income tax deductions are a matter of “legislative grace.” In light of this, the notion that the Constitution requires Congress to allow a deduction for state and local taxes seems far-fetched. Moreover, the argument possibly proves too much, as it would call into question the constitutionality of the decades-old limits on the deductibility of various state sales taxes, the alternative minimum tax, and perhaps even the standard deduction. And while one constitutional law scholar has suggested that the December 2017 tax law might be attacked on the grounds that the SALT provisions seem to specifically target the blue states whose residents rely most on the deduction, that same scholar also has acknowledged that “difficulties of proof” would probably prevent that argument from ever succeeding in court.

In recent weeks and months, officials in California, Connecticut, Illinois, New Jersey, New York, and elsewhere have turned their attention toward ways that those states can restructure their own tax systems so as to offset the impact of the SALT limits on residents. Three strategies have emerged as the most promising: (1) a shift toward an employer-side payroll tax with an exclusion or credit for wage income; (2) the use of charitable credits to finance state and local government agencies; and (3) implementation of an entity-level tax on passthroughs coupled with an

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59 See U.S. Const. amend. XVI.


62 Governor Cuomo has submitted draft legislative language to the New York state legislature that largely embodies the approach described here. See Budget Bill Submitted by the Governor in Accordance with Article VII of the Constitution (Feb. 15, 2018), https://www.budget.ny.gov/pubs/archive/fy19/exec/30day/REVArtVIINewPartMM.pdf.

63 California State Senate President pro tempore Kevin de León has introduced a version of the charitable credit arrangement described here, and the State Senate has approved the bill by a 27-7 vote. See SB 227 (passed Jan. 30, 2018), https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB227.
offsetting individual-level credit for member-shareholders. The following sections consider these three proposals at greater length.

A. A Payroll Tax Shift?

1. The Mechanics

The payroll tax shift is most easily illustrated in the context of a flat-tax state such as Illinois, where the tax rate on income is 4.95% (which we will round to 5% for arithmetic simplicity). Thus, when an employer pays an extra $100 to an employee, the state collects $5 and the employee receives $95 (before subtracting federal taxes). If the employee is in the 37% federal income tax bracket and above the $10,000 SALT cap, the employee will $37 in federal taxes and $5 in state taxes, leaving $58 in after-tax income.

Under the payroll tax shift, the employer would now face a tax of $5 for each $95 of wages paid. The combination of a $5 payroll tax and $95 of wages would lead to a $100 deduction for the employer (recall that taxes paid by businesses remain fully deductible under the new federal tax law). The state would either exclude wages paid by in-state employers from its personal income tax. The employee’s federal gross income would be $95, not $100, as employer-side payroll taxes are not a component of the employee’s gross income. For an employee in the 37% bracket, the federal income tax due would be $35.15, leaving $59.85 in after-tax income.

The payroll tax shift thus has the potential to raise after-tax income for employees without increasing after-tax costs for employers or reducing tax collections for the state. In the example above, the employee saves $1.85, the employer still receives a $100 deduction, and the state still collects $5. Better yet, the payroll tax shift allows the employee to exclude the $5 state tax payment from federal gross income regardless of whether the employee itemizes deductions on her tax returns. This approach thus yields benefits both for high-income itemizers above the new $10,000 cap and for low- and middle-income employees who claim the standard deduction.

Currently, eight states have flat income tax rates: Colorado, Illinois, Indiana, Massachusetts, Michigan, North Carolina, Pennsylvania, and Utah. For states with graduated rate structures, implementing the payroll tax shift while preserving the progressivity of the state tax system would pose an additional challenge. But the challenge is not insuperable: instead of a wage

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exclusion, states could offer employees a progressive wage credit that would maintain the existing
distribution of state tax burdens.

Specifically, a state with a progressive rate structure could shift toward an employer-side
payroll tax while allowing employees a credit against state personal income taxes calculated as
follows:

\[
\text{credit} = \text{payroll tax rate} \times \text{wages} + \text{income tax} - \text{alternative income tax}
\]

where “income tax” is the amount that the employee owes under the existing state rate structure,
and “alternative income tax” is the amount that the employee would pay if the product of the
payroll tax rate and the employee’s wages were added to gross income. To illustrate: Imagine that
a state has a graduated rate structure with a 5% rate on the first $100,000 of income and a 10%
rate above that. Prior to the payroll tax shift, an employee with $200,000 of taxable income would
pay a tax of 5% * $100,000 + 10% * ($200,000 – $100,000) = $15,000. With a payroll tax shift at
a payroll tax rate of 5/95 = 5.263%, the employer would pay a tax of 5.263% * $190,000 = $10,000.
The employee’s income tax (before any credit) would be 5% * $100,000 + 10% * ($190,000 -
$100,000) = $14,000, and the employer’s alternative income tax would be $15,000. The
employee’s credit would be 5.263% * $190,000 + $14,000 – $15,000 = $9,000, and so the
employee would owe $14,000 – $9,000 = $5,000 after applying the credit. Thus the state would
collect $10,000 in payroll taxes from the employer and $5,000 in personal income taxes from the
employee, for a total of $15,000.

This result can be replicated with any rate structure. The combination of an employer-side
payroll tax and an employee-side wage credit effectively eliminates the federal income tax on a
portion of the employee’s wages without sacrificing employer-side deductions or reducing state
revenues. The distribution of state tax burdens remains for all intents and purposes the same, and
employees in the state—including those who claim the standard deduction—will see their after-
tax incomes rise.

2. Design Details

States implementing a payroll tax shift would confront a number of additional design
questions. Most significantly, employers might be concerned that nominal wages will not adjust
downwards to reflect the fact that employers are paying more in payroll taxes and employees are
paying less in personal income taxes. Downward adjustments in nominal wages are quite rare: one
study of a representative sample of American workers from 1996 to 2000 found that nominal pay
raises are more than seven times as common as nominal pay cuts.67 Employers might be worried
that workers who do not understand the mechanics of the payroll tax shift will respond negatively
to any nominal wage reduction. And without a wage reduction, the payroll tax shift would indeed
raise the total cost of labor for employers.

67 Alessandro Barattieri, Susanto Basu & Peter Gottschalk, Some Evidence on the Importance of
Sticky Wages, 6 Am. J. Econ.: Macroeconomics 70, 92 (2014).
States could respond to this concern in one of two ways. One is to phase in the payroll tax at approximately the rate of inflation. Employers could thus avoid any increase in real labor costs while holding nominal wages constant. The inflation rate has been roughly 2% in recent years, meaning that a state could fully phase in a 5% payroll tax over about 30 months. A second approach is to allow employers to exercise choice over whether they become subject to the new regime. Employers that are especially concerned about wage stickiness would opt out (perhaps paying some nominal fee to do so), while employers who want to make additional federal tax benefits available to their workforce would choose to remain in. The wage exclusion or wage credit would be available only to employees whose employers opt to stay within the payroll tax system. These two approaches are not mutually exclusive: an inflation-rate phase-in could be paired with an opt-in or opt-out.

States also might choose to exclude wages below a certain threshold from the payroll tax. The new standard deduction of $12,000 for a single filer and $24,000 for a married couple filing jointly means that employees with income below that amount will not pay federal income tax anyway. Many workers with low incomes would prefer that their income for federal tax purposes be higher rather than lower because that leads to a larger earned income tax credit (EITC) and/or child tax credit. In light of this, states might apply their payroll tax only to income over a certain threshold (perhaps around $21,000, which is the point at which the refundable child tax credit fully phases in for a family with two children). The corresponding exclusion or wage credit could be adjusted accordingly.

States would, however, be ill advised to set the threshold for the payroll tax too high. Again, even employees who never claimed the SALT deduction because they found it more advantageous not to itemize still stand to benefit from a payroll tax shift that applies to middle-class workers. With a relatively modest floor, states can make it possible for even more of their residents to fund state-provided public services with federally deductible dollars.

3. IRS Response

But will the IRS allow it? One commentator has suggested that the Service could challenge the payroll tax shift on grounds supplied by the Supreme Court’s holding in the 1929 case Old Colony Trust Co. v. Commissioner. The argument carries little force. In Old Colony Trust, the taxpayer, William Wood, owed approximately $1 million in federal income taxes, which his employer, American Woolen Company agreed to pay on his behalf. The Supreme Court, in an opinion by Chief Justice William Howard Taft, held that the taxes paid for Wood by American

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69 See I.R.C. § 63(c)(7).
70 See I.R.C. § 24(h).
Woolen should be added to Wood’s taxable income and that Wood was liable for tax on that amount too. As Chief Justice Taft wrote:

[W]e think the question presented is whether a taxpayer, having induced a third person to pay his income tax or having acquiesced in such payment as made in discharge of an obligation to him, may avoid the making of a return thereof and the payment of a corresponding tax. We think he may not do so. . . . The discharge by a third person of an obligation to him is equivalent to receipt by the person taxed. . . . We think therefore that the payment constituted income to the employee.\footnote{279 U.S. at 729.}

But if an employer pays $95 in wages and then pays $5 in state payroll taxes, then in no sense has the employee “induced a third person to pay [my] income tax.” The $5 payroll tax is the employer’s legal obligation, not the employee. This is not a privileging of form over substance: If American Woolen Company had failed to pay Wood’s income tax, American Woolen Company might have been liable for breach of its promise but Wood is the one who would owe $1 million to the federal government (and the one who—in the worst-case scenario—would end up behind bars.) If an employer fails to pay the state payroll tax, it would be the employer—not the employee—who is legally liable.

Aside from Old Colony Trust, the IRS might argue that the employee’s federal gross income should grossed up by the amount of the wage credit that the employee claims. Such an argument, though, would have little basis in practice or precedent. The IRS has never considered employer-side payroll taxes to be part of an employee’s gross income. For nonrefundable credits, the IRS has treated these simply as a reduction in state taxes due. And for refundable credits, the general rule is that a state tax refund is included in gross income only “to the extent of the difference between the taxpayer’s itemized deductions in the prior year . . . and the deductions the taxpayer would have claimed . . . had the taxpayer paid the proper amount of state income tax in the prior year.”\footnote{Rev. Rul. 93-75, 1993-2 C.B. 63.} In other words, a taxpayer who claims the standard deduction or whose SALT deductions exceed the $10,000 SALT cap will not have to include a refund in income, and a taxpayer who itemizes, falls below the $10,000 SALT cap, and receives a refund will be no worse off than she would have been if she never claimed the credit in the first instance.

Congress could, of course, change the law and require that employer-side payroll taxes be included in employee gross income. But that is an unlikely outcome in the current political climate. Without the 14 Republican members of Congress from California and the nine Republicans from New York, congressional Republicans would have great difficulty cobbling together a legislative majority. And if California and New York implement a payroll tax shift, it is difficult to imagine that members from those states would vote for legislation aimed specifically at that practice.

B. Charitable Credits

1. The Mechanics
Proposals for using charitable credits to offset the new tax law’s impact take various forms, but all of them seize upon the fact that the new tax law allows an itemized deduction for charitable contributions up to 60% of adjusted gross income. This deduction applies to contributions to states and their political subdivisions and to organizations that are exempt from tax under section 501(c)(3). The nub of the charitable credit idea is to use the state tax system to encourage donations to state and local agencies (and perhaps to nonprofit organizations as well), with the result that more public goods and services would be funded through federally deductible dollars.

Imagine, for example, that a state introduces a transferable charitable credit available to “eligible entities,” which could include public school districts, state universities and community colleges, state parks, other state agencies, and—potentially—any other nonprofit organization based in the state that is exempt from federal income tax under section 501(c)(3). Eligible entities could obtain transferable credits from the state by paying $x to the state general fund or by forgoing $x in state funding to which the entity otherwise would be entitled. For the program to be revenue-neutral or revenue-positive for the eligible entity, $x$ must be less than or equal to $1$. Eligible entities could then distribute the credits to donors, who could use the credits to offset state tax liabilities. Donors would receive one credit for each $1 contribution, and a credit would reduce the donor’s tax liability by $y$, where $y$ is also less than or equal to 1.

Filling in the numbers: Imagine that $x = 0.90$ and $y = 0.80$. Thus, a public university could obtain a credit from the state general fund by paying 90¢ to the state general fund or by forgoing $0.90 in state appropriations. A donor who gives $1 to the public university would then obtain a credit that would reduce the donor’s state tax liability by 80¢. The arrangement would amount to a win-win-win for the state, for eligible entities, and for donor-taxpayers. The state would be 10¢ better off because the amount it would receive from the eligible entity (90¢) would be greater than the amount by which it would reduce the donor’s state tax liability (80¢). The eligible entity would be better 10¢ off because the amount it would receive from the donor ($1) would be greater than the amount it would pay to the state for the credit (90¢). And a donor who itemizes deductions on her federal returns, who is in or above the 22% bracket, and who already has exceeded the $10,000 SALT cap would be better off because the sum total of her state credit and federal deduction (80¢ + 22¢) would exceed her $1 donation.

While the mechanics might sound complicated on first glance, examples abound of programs of this type that are already up and running successfully. In recent years, more than 30 states have adopted charitable credit programs with credits ranging from 10% to 100% of contributions to various state agencies and nonprofit organizations. For example, Arizona allows a 100% credit—up to $545 for a single taxpayer and double that for a married couple—for contributions to school tuition organizations that fund scholarships for students to attend private and religious pre-kindergarten, elementary, and secondary schools. In many cases, these programs were engineered for purposes of “First Amendment arbitrage” rather than federal tax arbitrage. In the Arizona case, the Supreme Court has held that “[w]hen Arizona taxpayers choose

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75 I.R.C. § 170(c).
76 See Bankman et al., supra note 82, at app. A.
to contribute to [school tuition organizations], they spend their own money, not money the State has collected from . . . other taxpayers,” 78; this legal fiction serves to shield the program from Establishment Clause challenge. The arrangement also generates a federal tax benefit for donors subject to the AMT or above the $10,000 SALT cap who can use the credits to replace a nondeductible or partially deductible state tax payment with a fully deductible charitable contribution, but it does not appear that the federal tax benefit was the initial motivation for the program.

2. Design Details

States have lots of leeway to fill in the details of a credit program like the one described above. First, they can decide just how broadly to define the range of entities eligible to claim and transfer the credits. Second, they can decide whether to place caps on the number of credits available to a given entity or to allow for unlimited uptake. For example, a state might decide to establish a per-pupil limit on the number of credits available to each school district or to allocate additional credits to higher-poverty school districts; this would ensure that the credits are not used exclusively to finance public schools in the wealthiest areas of the state. Third, they can decide just how high to set $x$ and $y$. As long as $y > 63\%$, taxpayers in the 37% federal income tax bracket will have a pecuniary incentive to participate (and even if $y < 63\%$, some altruistic taxpayers may choose to participate in the program nonetheless). Moreover, as long as $x \geq y$, the program will be a revenue-neutral or revenue-positive for the state, and a wider wedge between $x$ and $y$ makes the program more profitable for the state general fund.

One attractive feature of the program—especially if the range of eligible entities is reasonably broad—is that it allows citizens to participate in the budgeting process. Charitable credit programs are analogous to tax-return “checkoffs” that allow individuals to earmark a portion of their payments for particular causes. As Saul Levmore has argued in a related context, allowing taxpayers to exercise some control over the direction of their dollars through checkoffs or credits potentially serves to (1) reduce the influence of narrow interest groups in the appropriations process and (2) aggregate information about citizens’ preferences in a way that can complement the information-aggregation function of elections. 79 Devolving some control over spending decisions to taxpayers through a credit mechanism also may—as Yair Listokin and David Schizer have suggested—bolster taxpayer morale and thus improve compliance. 80 Indeed, we might think of charitable credit programs as prelude to “participatory budgeting” at state and local level in the United States. 81

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81 See, e.g., Hollie Russon Gilman, Transforming Deliberations: Participatory Budgeting in the United States, 8 J. Public Deliberation no. 2, art. 11, at 2 (2012) (defining participatory budgeting as a “replicable decision-making process whereby citizens . . . deliberate publically over the distribution of . . . limited public resources” and where those decisions are then implemented). The charitable credit program described in text does not explicitly entail public
To be sure, charitable credit programs come with drawbacks. They, too, are vulnerable to capture by narrow interest groups that might seek to manipulate the “eligible entity” designation to favor particular causes or organizations. And the likely participants in charitable credit programs on the donor side are higher-income itemizers whose SALT deductions exceed $10,000. Deliberative democracy for the masses this is not. Whether it will ultimately lead to greater citizen control over the direction of state and local government funds is a topic for another day. The more pressing question is whether the charitable credit approach will pass muster with the IRS and the courts. It is to that question that this essay now turns.

3. Legal Status

The credit approach rests upon two premises regarding federal tax law: (1) that federal tax authorities will treat the donor-taxpayer’s contribution to an eligible entity as a charitable contribution eligible for deduction under section 170; and (2) that federal tax authorities will not treat the donor-taxpayer’s receipt of a credit from an eligible entity as income. Both premises are robustly supported by administrative and judicial precedent.82

First, courts consistently have held that a donor’s receipt of tax benefits in exchange for a charitable contribution “cannot be used as a basis for disallowing the deduction for that charitable contribution.”83 Indeed, if it were otherwise, then the charitable contribution deduction would be self-defeating because receipt of the deduction would vitiate the donative intent necessary to claim it. At previous points in U.S. history, ordinary income and capital gains rates have reached the point that a taxpayer would be better off financially if she donated an asset to charity than if she disposed of the asset herself.84 The mere fact that sum total of tax benefits made a charitable contribution “profitable” from the donor’s perspective did not then—and does not now—render the donor ineligible for a charitable contribution deduction.

deliberation, though modified versions could require or encourage deliberative decisionmaking over the direction of funds.

82 The arguments here are developed at greater length by this author and others in Joseph Bankman et al., Federal Income Tax Treatment of Charitable Contributions Entitling Donor to a State Tax Credit (Jan. 11, 2018), https://ssrn.com/abstract=3098291.


84 For example, in 1977, the maximum tax rate on ordinary income was 70% and the maximum rate on capital gains rounded to 40%. A top-bracket taxpayer holding a capital asset with basis of zero and fair market value of $100 could donate the asset to charity and claim a deduction worth $70, or could sell the asset and realize $60 after capital gains taxes. Cf. Tax Policy Ctr., Historical Highest Marginal Income Tax Rates (Mar. 22, 2017), http://www.taxpolicycenter.org/statistics/historical-highest-marginal-income-tax-rates; Tax Policy Ctr., Historical Capital Gains and Taxes (May 4, 2017), http://www.taxpolicycenter.org/statistics/historical-capital-gains-and-taxes,
Second, the IRS and the Tax Court have long maintained that receipt of a state tax credit does not constitute receipt of income for federal tax purposes. As the Tax Court phrased the proposition in the 2011 case Tempel v. Commissioner: “It is without question that a government’s decision to tax one taxpayer at a lower rate than another taxpayer is not income to the taxpayer who pays lower taxes.” The court in Tempel noted that the IRS has “eschewed” the view that state tax credits are an item of income to the taxpayer, adding: “We discern no reason to disturb this practice.”

These two premises are reflected in a memo from the IRS Chief Counsel—written in 2010 and released in 2011—that addresses the tax treatment of charitable credits issued by the State of Missouri. Missouri now offers credits of up to 50% for charitable contributions to various state-sanctioned programs that finance—among other priorities—crime prevention, substance abuse treatment, child advocacy, care for individuals with developmental disabilities, food pantries, domestic violence shelters, and higher education in the science, technology, engineering, and mathematics (STEM) fields. The IRS memo concludes:

There may be unusual circumstances in which it would be appropriate to recharacterize a payment of cash or property that was, in form, a charitable contribution as, in substance, a satisfaction of tax liability. Generally, however, a state or local tax benefit is treated for federal tax purposes as a reduction or potential reduction in tax liability. As such, it is reflected in a reduced deduction for the payment of state or local tax . . ., not as . . . an amount realized includible in income . . .. Accordingly, in the instant case Taxpayers may take a [charitable contribution] deduction for the full amount of their charitable contributions . . ., assuming the requirements of § 170 are otherwise met.

The IRS can—to be sure—rescind its 2011 Chief Counsel Advice memo, which is not binding as precedent. Moreover, the “unusual circumstances” language suggest the possibility that the IRS might adopt a different approach to different credit structures. However, an arrangement that tracks the contours of the Missouri programs—a transferable tax credit claimed by individuals who donate to state agencies or state-approved nonprofit organizations—would seem to entitle the donor to a charitable contribution deduction under existing IRS practice.

Lastly, if the IRS reverses its position on the deductibility of contributions to charitable credit programs, states would have an opportunity to challenge the IRS in court. This much is apparent from the Supreme Court’s 1984 decision in South Carolina v. Regan. In that case, South Carolina sought to challenge a federal statute that denied a tax exemption for interest on state

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85 See, e.g., Tempel v. Commissioner, 136 T.C. 341, 351 nn.19-20 (2011) (reaffirming “[t]he Commissioner’s longstanding administrative position . . . that the receipt and use of a State tax credit is not income”).
86 Id. at 351.
87 Id. at 351 n.17.
88 See IRS Chief Counsel Advice 201105010 (Oct. 27, 2010).
89 See Bankman et al., supra note 82, at app. A.
90 See IRS Chief Counsel Advice 201105010 (Oct. 27, 2010).
government bonds issued in bearer form. Generally, the 1867 Anti-Injunction Act bars a taxpayer from bringing a pre-enforcement challenge to a tax statute or regulation, but the Court in Regan held that the general rule did not apply to South Carolina’s case. While the tax on the interest on bearer bonds would be paid by bondholders rather than the state itself, the failure to grant favorable tax treatment to bonds issued by South Carolina would—as the Court recognized—have negative financial consequences for the state. In the Court’s view, the Anti-Injunction Act “was intended to apply only when Congress has provided an alternative avenue for an aggrieved party to litigate its claims on its own behalf,” and Congress had provided no such alternative for South Carolina. Accordingly, the Court allowed South Carolina to proceed with its challenge (although it ultimately ruled against South Carolina on the merits).

The reasoning of South Carolina v. Baker applies squarely to states that might seek to challenge a (hypothetical) IRS reversal on the federal tax treatment of contributions to charitable credit programs. Just as the taxation of interest on state bearer bonds would drive up financing costs for South Carolina, the failure to grant favorable tax treatment to participants in these programs would dry up demand for the credits. It would not, however, increase the tax liability of the states themselves, and so they would have no opportunity to challenge the IRS’s position in a subsequent Tax Court petition or refund suit. Since the states would lack “an alternative avenue to . . . litigate [their] claims on [their] own behalf,” Baker implies that they could bring a pre-enforcement challenge. Thus, states will likely have an opportunity to clear up any confusion regarding the legal status of charitable credit programs if the IRS tries to attack these arrangements.

C. Passthrough Business Tax

1. The Mechanics

The last of the three potential state legislative responses to the SALT deduction is likely the least impactful in dollar terms—and also possibly the most convoluted. It would entail an entity-level tax on passthrough businesses—partnerships, S corporations, and potentially sole proprietorships—coupled with a refundable personal income tax credit for passthrough members. For reasons explained below, the entity-level tax would have to be calculated on some basis other than income (e.g., gross receipts). The credit would then be computed as follows:

\[
\text{credit} = \text{pro-rate share of passthrough tax + income tax} - \text{alternative income tax}
\]

where “income tax” is the amount that the member owes under the existing state rate structure, and “alternative income tax” is the amount that the member would pay if the member’s pro rata share of the passthrough tax were added to gross income.

To illustrate: Imagine again a state with a 5% tax rate on the first $100,000 of income and a 10% rate above that. Imagine, moreover, that an individual holds a 50% interest in a partnership

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92 See I.R.C. § 103(j)(1).
93 See I.R.C. § 7421(a).
94 Regan, 465 U.S. at 381.
with gross receipts of $2,000,000 and deductible expenses of $1,800,000. Finally, imagine that the individual has $50,000 of non-passthrough income.

Before the passthrough tax and corresponding credit are implemented, the individual’s income from the partnership would be $100,000, on top of $50,000 from non-passthrough sources, for total income of $150,000. The individual’s state tax liability would be $10,000, leaving $140,000 in income after state taxes.

Now imagine that the state imposes a tax of 1% on the gross receipts of passthrough entities, including partnerships. The partnership would pay a tax of $20,000, of which half ($10,000) would be allocable to the 50% partner. The individual’s pro rata share of partnership income after entity-level taxes would be $90,000. For personal income tax purposes, the individual would now be taxed on income of $50,000 + $90,000 = $140,000, for a pre-credit liability of $9,000. The credit would fully offset the individual’s personal income tax liability, and thus she would owe nothing more to the state. The state would be in the same position as before ($10,000 collected), and the individual’s after-state-tax income would be the same as before ($140,000).

Again, the attraction of this arrangement is that it potentially transforms nondeductible personal income taxes into deductible entity-level taxes. To see how, consider the text of the new section 164. The amended provision reads in relevant part (with apologies for the very long block quote):

(a) Except as otherwise provided in this section, the following taxes shall be allowed as a deduction for the taxable year within which paid or accrued:
   (1) State and local, and foreign, real property taxes.
   (2) State and local personal property taxes.
   (3) State and local, and foreign, income, war profits, and excess profits taxes.

In addition, there shall be allowed as a deduction State and local, and foreign, taxes not described in the preceding sentence which are paid or accrued within the taxable year in carrying on a trade or business . . .

(b) . . .

(5) For purposes of subsection (a)
   (A) At the election of the taxpayer for the taxable year, subsection (a) shall be applied—
   (i) without regard to the reference to State and local income taxes, and
   (ii) as if State and local general sales taxes were referred to in a paragraph thereof.
   (B) The term “general sales tax” means a tax imposed at one rate with respect to the sale at retail of a broad range of classes of items. . . .
(6) In the case of an individual and a taxable year beginning after December 31, 2017, and before January 1, 2026 . . .

(B) the aggregate amount of taxes taken into account under paragraphs (1), (2), and (3) of subsection (a) and paragraph (5) of this subsection for any taxable year shall not exceed $10,000 ($5,000 in the case of a married individual filing a separate return). 96

A tax on the gross receipts of a passthrough is not a tax on real property, personal property, or income, and so does not fall into paragraphs (1), (2), or (3) of section 164(a). Arguably, it is also not a general sales tax because it applies to all receipts whether or not they correspond to “sale at retail,” and thus does not fall within paragraph (5) of subsection (b). And because the tax is not taken into account under paragraphs (1), (2), or (3) of subsection (a) or paragraph (5) of subsection (b), it is not subject to the $10,000 cap.

2. Design Details

The two most important design details of a passthrough tax are the rate and the scope. As for the rate: Profit margins vary widely across industries, and so a tax that is a percentage of gross receipts will have dramatically different effects on different businesses. For example, the average profit margin in the restaurant industry was 5% in 2013, according to one source, 97 while the profit margin for some one-person consulting LLCs may be close to 100%. A tax of 1% times gross receipts might amount to roughly 20% of income for a restaurant and only 1% of income for a solo consultancy. As long as credits are refundable, a 1% gross receipts tax would not be disastrous for the average restauranteer, but it could create cash flow problems of various sorts. States might respond by trying to set sector-specific tax rates, though that approach would add considerably to the complexity of state tax systems.

As for scope: Perhaps the most important decision is whether to extend the tax and the corresponding credit to sole proprietors. Doing so would potentially benefit individuals ranging from Uber drivers to solo legal practitioners, who now would be able to satisfy some or all of their state tax liabilities with federally deductible dollars. On the other hand, states might decide to spare sole proprietors the added hassle of entity-level tax compliance. The optimal approach is difficult to discern in the abstract.

3. Legal Status

The premises underlying the passthrough approach are (1) that entity-level gross receipts taxes will not be subject to the $10,000 SALT cap, and (2) that the corresponding credit will not be included in member income. The latter proposition has been discussed in further detail above. As for the former, the difference between an income or general sales tax and a gross receipts tax has never mattered much for federal income tax purposes, and so precedent on the subject is thin. As a strictly textual matter, the argument that gross receipts taxes are not subject to the $10,000 cap is

96 See I.R.C. § 164.
cap seems straightforward, but the available materials supply little basis for a stronger claim than that.

**Conclusion**

What should we make of the fact that states have ample opportunities to offset the effect of the SALT rollback on their citizens? One reaction is to wonder why they have not seized these opportunities already, especially in light of the fact that the payroll tax shift would have benefitted standard deduction claimants even before the recent SALT rollback and the other approaches could have helped AMT taxpayers. But perhaps the political will to reengineer stable state tax systems simply did not exist before the December 2017 tax law thrust SALT into the spotlight. By waking a sleeping giant, the new tax law ironically may have spurred SALT’s extension.

Beyond that, the state strategies limned above expose the flimsiness of the justification for the new SALT limits. The payroll tax shift works because the law allows for full deductibility of employer payroll taxes but not for employee income taxes. But legal incidence does not determine ultimate burden, and economically, the difference between an employer-side tax on wages paid and an employee-side tax on wage income is trivial. The charitable credit approach works because the new law generally allows a deduction for charitable contributions to government and nonprofit institutions—again, the difference between a state tax and a tax-motivated donation to a state institution is quite slight. And the passthrough tax potentially works because the law allows for full deductibility of gross receipts taxes but not general sales taxes. The sin of the new tax law, then, is that it tries to draw legal distinctions where logic and economics find none.

In sum, the death of SALT ought not be mourned, because the SALT deduction is not dead at all. As long as business taxes and charitable contributions remain deductible, states can save SALT from demise. That is probably for the better, because the SALT deduction maintains parity between the civic sector and the nonprofit sector while also according with the consumption tax principles underlying other elements of the Code. But whatever one’s view on the deduction’s merits, we can all be impressed by SALT’s persistence. Cap or not, the SALT deduction is quickly proving that it is here with us for the long haul.
Appendix

The example in this appendix serves to illustrate the proposition that repeal of the SALT deduction negatively affects the supply of labor/capital and adds to the deadweight loss of the overall tax system. Consider two states, State X and State Y, each with identical populations and labor markets. For arithmetic ease, assume that the marginal product of labor for all workers is 100, that workers’ pre-tax wages are equal to their marginal product, and that the labor supply curve in each state is \( Q = 100(1 - t) \), where \( t \) is the tax rate. Thus, with no tax, \( Q = 100 \) in each state (200 units of labor total). Deadweight loss is equal to one-half the square of the product of the tax per unit and the change in the equilibrium quantity as a result of the tax.\(^98\) Here, where \( \Delta Q = 100\Delta t \), deadweight loss is \( 0.5 \times 100\Delta t \times 100\Delta t \), or \( 5000\Delta t^2 \).

Next, imagine a federal tax on labor of 40%. Labor output in each state falls from \( Q = 100 \) to \( Q = 100(1 - 0.4) = 60 \) (120 units of labor total). Federal tax revenue from each state is \( 60 \times 0.4 \times 100 = 2400 \) (4800 total). Deadweight loss in each state is \( 5000\Delta t^2 = 800 \) (1600 total).

Next, imagine that State X (but not State Y) levies an additional state tax of 10%. Assume that state taxes are deductible from federal taxable income, so the effective federal tax rate in State X is 36% and the combined federal-plus-state tax rate in State Y is 46%. Labor output in State X is now \( Q = 100(1 - 0.46) = 54 \). Federal tax revenue from State X is \( 54 \times 0.36 \times 100 = 1944 \). Deadweight loss in State X is \( 5000(0.46)^2 = 1058 \). Federal tax revenue from State Y remains 2400, labor output in State Y remains at 60 units; and deadweight loss in State Y remains 800. Total federal tax revenue is now 1944 + 2400 = 4344; total labor output is now 54 + 60 = 114 units; and total deadweight loss is now 1058 + 800 = 1858.

Now consider the effect of revenue-neutral repeal of the state tax deduction. For repeal to be revenue neutral for the federal government, the new federal tax rate (\( r \)) must be set such that federal tax revenue from State X + federal tax revenue from State Y = 4344. Thus:

\[
(Q_X)(r)(100) + (Q_Y)(r)(100) = 4344 \\
-20000r^2 + 19000r - 4344 = 0 \\
r \approx 0.3832 \text{ or } r \approx 0.5668
\]

Assuming that the federal government chooses the lower rate of 38.32%, labor output in State X is now approximately 51.68 units, and deadweight loss in State X is now \( 5000(0.4832)^2 \approx 1167 \). Labor output in State Y is now approximately 61.68 units, and deadweight loss in State Y is now \( 5000(0.3832)^2 \approx 734 \). Total labor output is approximately 51.68 + 61.68 \approx 113.36 units, and deadweight loss is approximately 1167 + 734 \approx 1901.

Here, the same amount of federal tax revenue (4344) can be raised either (a) with a 40% federal tax rate and a state tax deduction or (b) with a 38.32% tax rate and no state tax deduction. Option (b) results in lower labor output than option (a) (113.36 units < 114 units, a reduction of approximately 0.56%) and greater deadweight loss (1901 > 1858, an increase of approximately 2.31%).