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Viewpoint: Can U.S. local soda taxes continue to spread?

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Abstract

Taxes to reduce the consumption of sugar-sweetened beverages (SSBs) such as soda drinks have been endorsed by the World Health Organization and are now in place in France, Hungary, and Mexico, and scheduled for Portugal, South Africa, and Great Britain. Such taxes have so far been impossible to enact in the United States at the state or federal level, but since 2014 seven local jurisdictions have put them in place. Three necessary conditions for local political enactment emerge from this recent experience: Democratic Party dominance, external financial support for pro-tax advocates, and a political message appropriate to the process (public health for ballot issues; budget revenue for city council votes). Roughly 40 percent of Americans live within local jurisdictions where the Democratic Party dominates, so room exists for local SSB taxes to continue spreading.

Keywords

Soda; Tax; City; Ballot; Health; Revenue

1. Introduction

As obesity trends worsen globally, taxes designed to reduce the consumption of sugar-sweetened beverages (SSBs) emerge as a widely endorsed policy option. The World Health Organization reported in October 2016 that global obesity prevalence had doubled since 1980, and suggested SSB taxes as one policy response. As of May 2017, France, Hungary, Catalonia in Spain, and Mexico already had SSB taxes in place, Portugal and South Africa had plans to begin such taxes, and Britain had approved a tax to begin in 2018 (AHAN, 2016). There is strong evidence supporting the potential for SSB taxes to reduce consumption and improve human health (Afshin et al., 2017; Powell et al., 2013; Andreyeva et al., 2010; Escobar et al., 2013). Our purpose here is to evaluate the political feasibility of enacting such taxes within the American political context.

SSB taxes are unlikely to be enacted at the federal level in the United States any time soon given the results of the 2016 election, but at the local level prospects have recently improved. In 2014 the city of Berkeley, California, enacted a penny-per-ounce SSB tax. Then in 2016 six more local jurisdictions followed suit: Philadelphia, San Francisco, Oakland, Albany

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(CA), Boulder, and Cook County in Illinois, which incorporates the city of Chicago with 5.2 million residents. In May 2017 a ballot issue for SSB taxes failed in Santa Fe, but other municipalities such as Seattle were poised to try. How far can this new locally led policy movement spread?

As recently as March 2016, the American Beverage Association (ABA) was continuing to dismiss the tax threat, bragging that more than 40 sweetened beverage tax proposals at the city level had been defeated since 2008 (ABA, 2016). But later that year, after six new proposals were all successful despite intense ABA opposition, the ABA no longer seemed so invincible. Speaker Tip O’Neil once reminded us that “All politics is local,” but can locally adopted soda taxes continue to spread in the face of what appears to be a substantial pro-business, anti-tax political tide at both the state and federal level?

The present manuscript examines the evidence for this question based on a comparative review of the SSB tax efforts made so far, with a focus on city characteristics, process characteristics, and issue framing. It concludes that a further horizontal diffusion SSB taxes is indeed possible, particularly to jurisdictions heavily dominated by the Democratic Party. Vertical diffusion to the state level can be more difficult even in Democratic-dominated states, and vertical diffusion to the federal level more difficult still, given the current party composition of Congress. A limited spread of local taxes only might seem less than ideal for public health, but a surprisingly large share of the United States population lives in Democratic-dominated local jurisdictions, creating an opportunity for substantial tax diffusion. Calculations based on patterns of party control suggest that local SSB taxes have potential to spread into multiple local jurisdictions holding as much as 40 percent of the nation’s population.

In the work that follows, we begin by reviewing the health-boosting potential of excise taxes on sugar-sweetened beverages. We then consider past failures to promote such taxes at either the state or federal level. Then we turn to eleven separate efforts to enact SSB taxes at the local level made since 2012, to identify the factors either necessary for political success or sufficient to bring failure. We learn that two different procedural pathways can be taken to secure a soda tax victory at the municipal level, and that each has a different success profile.

2. The health-boosting potential of excise taxes on SSBs

SSBs include soft drinks, sodas, fruit drinks, pre-sweetened coffees and teas, energy drinks, sports drinks, and sweetened waters. Together, they are the single largest source of added sugars in the American diet (Huth et al., 2013). According to the American Heart Association, SSB consumption is linked to increased risks for type 2 diabetes, obesity, hypertension, coronary heart disease, and tooth decay, with low-income and racial or ethnic subgroups being at greatest risk (AHA, 2016; Mozaffarian, 2016; Moynihan and Kelly, 2014; Micha et al., 2017a,b). Many of these adverse medical outcomes have recently been on the rise in the United States. From 1980 through 2014, the number of Americans diagnosed with diabetes increased from 5.5 million to 22 million. According to a 2015 Centers for Disease Control and Prevention report, 38 percent of American adults are now obese, up from 32 percent as recently as 2004 (Stobbe, 2015). A dedicated tax on SSBs, if

calibrated at one penny per ounce (enough to raise the price to consumers by roughly 17 percent), would be likely to reduce consumption among adults by about 15 percent. Based on modeling estimates, this, in turn, could prevent 2.4 million diabetes person-years, 95,000 coronary heart events, 8000 strokes, and 26,000 premature deaths, reducing direct medical costs by \$17 billion (Wang et al., 2012).

The actual changes observed following the recent enactment of soda taxes in two diverse jurisdictions confirm the potential of such policies to reduce beverage consumption. In 2013, Mexico passed an excise tax of one peso-per-liter, or roughly 10 percent. After one year, a 10 percent decline in purchases of these taxed beverages was seen overall, and households with lower socioeconomic status experienced a larger 17 percent decline in purchases. At the same time, plain water purchases increased by 13 percent (Colchero et al., 2016). A subsequent study based on store purchase data for 6645 households in Mexico found that average declines were sustained at a 9.7 percent level during the second year of the tax (Colchero et al., 2017). The city of Berkeley had a parallel experience after its penny-per-ounce SSB tax went into effect in March 2015. Supermarkets in Berkeley passed virtually all of the excise tax through to consumers, so in the first year SSB sales declined by 10 percent. Sales of untaxed beverages increased (Silver et al., 2017).

SSB taxes such as these would gain wide favor in the United States if the sole concerns were public health and health care costs. Yet taxing this popular consumption item has long met political resistance not only from the beverage industry but also from elected politicians, anti-hunger advocacy groups, and ordinary citizens on both the left (because the tax is regressive) and the right (among opponents of a “nanny state”) (Paarlberg, 2015). Accordingly, efforts to enact soda taxes until recently had a history failure at both the federal and state level.

3. Failed soda tax efforts at the federal and state level

Many state governments impose retail sales taxes on groceries, often including SSBs. As of 2014, 34 states plus the District of Columbia taxed soda, but at an average level of only 5 percent. These sales taxes are not easily visible to consumers, since they are only charged at checkout, which diminishes the impact on consumption (Chriqui et al., 2014). The highest tax rates have been 7 percent in Mississippi, New Jersey, and Rhode Island, but this is still short of the 10 percent level seen as a minimum required to cause an appreciable drop in consumption. Public health advocates in the United States tend to favor a penny-per-ounce rate, which would raise the cost of the average sugary drink by 15–20 percent (Friedman, 2017). In addition to state retail sales taxes, state excise taxes have been employed on SSBs, just as they are against cigarettes (overall averaging \$1.69 per pack). Currently four states impose excise taxes on SSBs (Arkansas, Tennessee, Virginia, and West Virginia), but not enough to reduce consumption. West Virginia, for example, imposes an excise tax on bottled soft drinks at a rate only 1/17th as high as a penny an ounce (Pinho, 2015).

Rising obesity rates have recently prodded several states to consider enacting dedicated SSB taxes steep enough to reduce beverage consumption. In 2008, New York Governor David A. Paterson included a 12-cent per can soda tax in his initial 2009 budget proposal. He

soon dropped the idea because it met broad resistance not only from the American Beverage Association (ABA), which spent \$9.4 million on a public campaign to oppose the tax, but also from private grocers in New York, the Teamsters union, state legislators with soda distribution centers and bottling companies in their districts, and also from organizations claiming to speak for low-income and minority New Yorkers (Hartocollis, 2010).

Also in 2008, the Maine Legislature actually passed a small alcohol and soda tax (only one third of a penny an ounce), but the beverage industry fought back immediately with a \$4 million “Fed up with Taxes” ballot initiative campaign, which persuaded voters to repeal the tax two years later (Peters, 2010). The beverage industry also campaigned successfully to reverse an even smaller state SSB tax in Washington, where the legislature in 2010 had imposed a new tax on soft drinks (and candy) of only 1/6 cent per ounce. The ABA spent \$16.5 million on a ballot initiative campaign that overturned even this tax.

At the federal level, SSB taxes have so far been rejected as well. In 2009, newly elected President Barack Obama enjoyed wide Democratic Party voting margins in both the House (256–178) and Senate (59–41), and had placed health insurance reform at the top of his agenda. Public health advocates proposed a federal tax on sugary beverages as one way to help pay for the reform. Yet the Obama Administration never endorsed this approach. The President decided instead to honor his 2008 campaign promise not to raise “any form” of taxes on families making less than \$250,000 a year. Taking no chances, 21 different beverage companies and organizations lobbied the Senate against the tax idea during the first 9 months of 2009, spending \$24 million in the process. The American Beverage Association by itself spent a total of \$7.3 million to oppose the tax, and the National Corn Growers Association (with an interest in corn based sweeteners) spent an added \$200,000. By November 2009, nobody in Congress was talking about a federal soda tax, and in May 2010, a White House task force on childhood obesity explicitly handed the idea back to the states, inviting them to experiment with SSB taxes should they wish to do so (Paarlberg, 2015).

Up until 2014, SSB tax proposals had also met failure at the local level. Whenever municipal tax efforts were mounted, they were always defeated, no fewer than 40 times according to the ABA. But then came Berkeley’s breakthrough success in 2014, followed by six local enactments in 2016 (Philadelphia, San Francisco, Oakland, Albany, Boulder, Cook County). A tax effort failed in Santa Fe in May 2017, but advocates for SSB taxes had nonetheless opened a local enactment path. In the future, how far might that path lead?

4. Local SSB tax efforts: Learning from failure

Two typical local SSB tax failures came in 2012, in the cities of El Monte and Richmond in California. In El Monte, a small city of 113,475, the mayor and city council had promoted a ballot measure to impose a penny-per-ounce excise tax on SSBs, but the measure was rejected on Election Day by 76 percent of those who voted. The main objective had been new budget revenues, not public health; as Mayor Andre Quintero said at the time, “We’re going to need revenue to provide services and stop that slow march to bankruptcy” (Velazquez, 2012). Local business leaders opposed the measure from the start, and El

Monte's large minority community (25 percent Asian, 69 percent Hispanic) was turned against the measure by a \$1.3 million opposition campaign funded by the ABA, featuring "No on Measure H" signs and billboards, and radio and TV commercials in Spanish as well as English. The campaign in support of Measure H spent only \$57,000. Mayor Quintero later said, "To be competitive in a race like this you've got to raise between \$1.5 and \$2 million... And for a local official, that's just unreal." (Allen, 2012) Asking the low-income citizens of El Monte to vote for higher taxes would have been difficult in any case, since they were already paying an unusually high sales tax of 9.75 percent, compared to the 8.7 percent sales tax in the rest of Los Angeles County.

The California city of Richmond also failed to pass an SSB tax ballot measure on Election Day in 2012, when 67 percent of voters said no. The Richmond ballot issue, drafted by a former chief of cardiology at Kaiser Richmond Medical Center, was framed as health improving, and the campaign secured endorsement from the American Academy of Pediatrics and the American Public Health Association. The revenue would be intended (although not firmly earmarked) for sports and health education programs aimed at local youth. Organized opposition came from local business, the Teamsters union, and leaders in the minority community including the local branch of the NAACP. Two out of Richmond's seven city council members – both African-Americans – had voted not to put the measure on the ballot. The ABA worked hard to defeat the tax, spending roughly \$2.5 million on a vigorous "No on N" campaign (Rogers, 2012). Those promoting the measure had raised only \$10,000 going into the final two months of the campaign, and never stood a chance to compete (Vara, 2012). Richmond was a famously progressive city (the city council consisted of a Green Party mayor and six Democrats), but on Election Day it still voted two-to-one against SSB taxes.

Given these failures in El Monte and Richmond, how did Berkeley manage to pass an SSB tax measure two years later, by a wide margin of 76 percent? The most important new element was a decision made in 2012 by Bloomberg Philanthropies to begin funding campaigns to reduce soda consumption, starting with a \$10 million effort in Mexico that produced the 2013 victory there (Rosenberg, 2015). These funds made possible add campaigns, grass-roots mobilization, and direct lobbying of legislators, to counter the blocking efforts by industry. The Mexican outcome emboldened both San Francisco and Berkeley to pursue SSB taxes in 2014.

San Francisco's 2014 effort fell short in part because Bloomberg provided no financial support to the pro-tax campaign, having judged it would not be likely to succeed (Knight, 2014). One reason was a legal technicality. San Francisco's proposed tax was not only twice as high (two cents per ounce); the revenues were formally earmarked to be spent on "nutrition, physical activity, and health programs in public schools, parks, and elsewhere." Under California law voters must approve new local taxes through ballot issues, and if the tax revenues are earmarked for special purposes at least a two-thirds vote is required. San Francisco's measure thus failed even though it gained 55 percent of the vote.

The positive vote total might have been higher if the Board of Supervisors had not been divided (four of the ten Board members originally opposed putting the measure on the

ballot, and the mayor did not take a position), and if minority leaders had not branded the measure as regressive against the poor. The measure secured its weakest support from neighborhoods with low-income and minority voters. But it also came down to the money. The head of the failed 2014 San Francisco tax campaign said at the time, “We had no funding to execute any communication strategy.”(Knight, 2014) Supporters raised \$255,000 to promote the tax, but they were outspent 30 to 1 by the opponents, led by the ABA, which spent \$9.1 million to defeat the proposition (Woldow, 2014).

In Berkeley next door, the city leaders were united in 2014, the minority community was far more supportive (the NAACP endorsed the tax), and care had been taken not to earmark the revenues, so only a majority vote would be required. Bloomberg was thus willing to provide \$657,000 for a pro-tax campaign, and in the end 76 percent of voters supported the measure, far more than needed. John and Laura Arnold, wealthy individuals from Texas, also gave \$70,000 to the Berkeley effort through their organization Action For Healthy Food (Evich, 2015). Those trying to block the tax spent \$2.4 million, but against a unified and well-funded pro-tax campaign this was not enough (Sullivan, 2014).

Revenues from Berkeley’s tax could not be earmarked formally without triggering a two-thirds requirement, so the drafters of the ballot issue designed an indirect mechanism to accomplish a similar goal. The measure created a panel of experts in child nutrition, healthcare, and education to make *recommendations* to the City Council about funding programs to improve children’s health across Berkeley, and issue annual public reports detailing the impact of these programs. In 2016, this innovative approach was copied with success in San Francisco plus two other California cities, Oakland and Albany.

At first, the Berkeley victory in 2014 appeared to be of only limited public health significance, since this small city of just 80,000 registered voters was unusually liberal (79 percent registered Democrats), and relatively affluent (average condo sale price: \$434,750). Also, Berkeley was only 41 percent non-white (versus 53 percent for San Francisco), and per capita soda consumption was low. Nearly 70 percent of residents were college graduates, compared to just 52 percent in San Francisco, making them less susceptible to the SSB industry’s “scare and confuse” tactics (Woldow, 2014). If cities like Berkeley were the only kind that could prevail against SSB tax opponents, larger municipalities with the low-income populations most prone to health risks from SSBs might never be able to use this policy instrument.

Such limiting judgments had to be revised after Philadelphia enacted a 1.5 cent-per-ounce SSB tax in the summer of 2016. Philadelphia took this step through a simple city council budget vote rather than a separate ballot issue, and it framed the vote as a revenue initiative rather than for public health. Mayor Jim Kenney proposed this new \$91 million annual tax to pay for an added 6500 children in public pre-K education (Brey and Otterbein, 2016). The previous Mayor, Michael Nutter, had proposed an SSB tax in 2010 and 2011 as a public health measure, only to be refused by the city council – including by Kenney who was on the council at the time (Vara, 2012). Rejected as a health policy, SSB taxes were now successfully embraced for budget revenue purposes.

Philadelphia was a large city 63 percent non-white, yet it displayed some common elements with the earlier Berkeley breakthrough. In both cases there was an explicit endorsement by the NAACP. In Philadelphia this African-American support was secured through the mayor's promise of new pre-K spending in minority neighborhoods, plus parks, libraries, and recreational facilities. All eight African-American Democrats on the City Council supported the tax. Minority community representatives can accept an SSB tax if it funds public services for their benefit. When framed as a way to coerce better personal health choices, such taxes are likely to be rejected by leaders in these communities as regressive and patronizing (Hayes, 2016). City councilors also will prefer a revenue framing because it means more public spending and hence more ribbon-cuttings in the neighborhoods before the next election. Improved public health outcomes are also valued, but they bring smaller transactional benefits to politicians because they come more slowly and trace less directly to government action. Kenney's promise of more public spending on education and public works also helped win support from Philadelphia's building trades and teachers unions (Terruso, 2016).

A second common feature between Berkeley and Philadelphia was external financial support, especially from Bloomberg Philanthropies and also from the Texans John and Laura Arnold. Bloomberg helped to fund "Philadelphians for a Fair Future," a coalition of civic and labor organizations that lobbied for the tax. Thomas Farley, who had been Mayor Bloomberg's health commissioner and soda fighter in New York, even went to Philadelphia as Mayor Kenney's health commissioner (Brey and Otterbein, 2016). Even though Philadelphia's measure was not a ballot issue, getting it through the city council required an intense lobby effort to offset the \$5 million spent by an ABA-funded group calling itself "No Philly Grocery Tax." Both sides lobbied City Council members for months and held demonstrations in front of City Hall.

5. Replicating Berkeley

Despite Philadelphia's city council enactment in June 2016, most other cities seeking SSB taxes continued to pursue the ballot issue path. This approach proved successful in November 2016 for three more California cities (San Francisco, Oakland, Albany), plus Boulder, Colorado. Each of these cities used Berkeley's "soft earmark" method for directing revenues toward public health, and in each case voters delivered the necessary majority. The pro-tax advocates in each of these cities (except Albany, a tiny city within media range of Oakland and San Francisco) enjoyed external financial assistance from Bloomberg Philanthropies as well as from Laura and John Arnold and others. The pro-tax factions in San Francisco and Oakland together had \$22 million to spend, which was less than the \$30 million spent by industry to oppose these measures in 2016, but enough to win by a safe 62 percent margin in each case (Choi, 2016).

Then, two days after the November election, Cook County in Illinois enacted an SSB excise tax by following the Philadelphia process: a simple budget vote by the elected Cook County Board of Commissioners. This was significant because Cook County encompassed the City of Chicago with 5.2 million residents. The Board of Commissioners initially deadlocked 8–8 on this measure to add a penny-per-ounce SSB tax to the county budget, but the tie was

broken by Board President Toni Preckwinkle, a leading tax supporter. The Board President and Commissioners supporting the tax expected it to bring in \$75 million a year, enough to help close a projected \$174 million budget shortfall and avoid public layoffs (D'Onofrio, 2016). Consistent with this revenue motive, the tax would be imposed on diet soda as well as caloric soda, just like in Philadelphia. The Cook County vote came after 3 hours of public testimony where the beverage industry argued the measure was illegal, since the city of Chicago already had a 3 percent tax on retail sales of soft drinks (Dardick, 2016). The ABA spent \$600,000 in Cook County to oppose the tax, but Bloomberg countered by spending \$1 million to put up ads under his own name, in support (Dardick, 2016).

The next twist in the local SSB tax story emerged in May 2017, when a ballot measure to impose a two cents per ounce tax failed in Santa Fe, with a decisive 58 percent “no” vote (Last, 2017). Mayor Javier Gonzales had proposed the tax to fund an expansion of pre-K education for children from low income families – similar in many ways to Philadelphia’s tax – but not all on the city council were supportive. City Councilor Ron Trujillo, from a largely middle-class district, opposed the tax on grounds that it would be regressive and cost jobs. He also said the city had more pressing infrastructure needs, and should leave the funding of education to the state (Grimm and Hsieh, 2017). Santa Fe’s lower-income and middle-income neighborhoods in the end voted 2-to-1 against the measure. Opposition also came from a well-regarded rector of a local cathedral, community activists, and a libertarian foundation. The pro-tax campaign received \$1.1 million in financial support from Bloomberg and it actually outspent the ABA-funded anti-tax campaign, but this was not enough to prevent defeat (Grubs, 2017).

Santa Fe broke a significant win streak for local SSB tax advocates, but campaign leaders responded “this isn’t over,” and vowed that the movement would continue in Seattle, and beyond. The Seattle effort will be a city council vote rather than a ballot issue. Tax revenues will be earmarked for programs to help low-income and vulnerable children, such as before- and after-school programs, summer learning programs, and college scholarships, a framing that the council vote process might favor.

6. How widely can local SSB taxes be enacted?

Are the successful tax enactments in 7 local jurisdictions since 2014 just the beginning? A comparison of city characteristics suggests both limits and opportunities. Table 1 summarizes some key characteristics of the eleven jurisdictions making significant efforts at SSB tax enactment since 2012.

Note that all eleven cities making local SSB tax efforts since 2012, whether successful or not, were strongly dominated by the Democratic Party. Cities without Democratic Party dominance did not even try. In all of these cities, at least two out of three voters were Democrats, and in all of the successful cases registered Democrats made up at least 72 percent of the voting population. Yet Table 1 also reveals that in most other respects the cities making tax efforts were quite heterogeneous. Even among the seven successful cases, there is considerable variation in population size, wealth, educational attainment, and racial diversity.

Even if Democratic Party dominance is a political prerequisite for local SSB tax enactment, considerable room can be found in the United States for a potential further spread. In one count of the largest 100 cities in the country in 2016, 73 of these 100 had Democratic mayors (Ballotpedia, 2016). Democratic Party dominance at the municipal level has also been increasing. The Pew Research Center found in 2016 that 86 percent of the 100 most populous counties in America voted Democratic in the 2012 presidential election, which was an increase from just 57 percent in 1976 (Pew, 2016). These 100 most populous counties were home to 39 percent of all voters in the country, a sizeable share of the population under local Democratic Party control.

Another way to estimate the potential for local SSB tax to spread is through the proxy indicator of population density. Analysts noted in the 2012 presidential election that the Democratic share of the vote increased sharply when population density exceeded 800 people per square mile. Above that threshold, 66 percent of voters picked Obama over Romney (Troy, 2012). Once again, a sizeable share of the total population lives in these densely populated areas. Based on the 2010 census, 186 of the nation's 3,196 counties had a population density above 800 per square mile, and together they contained a population of 127 million people, or 41 percent of the national population at that time (US Census, 2010). So even if Democratic Party dominance is a necessary condition for the enactment of local SSB taxes, roughly 4 in 10 Americans are still potentially reachable by such taxes.

Within Democratic-dominated cities and counties, are SSB taxes more likely to spread through Berkeley-style ballots or Philadelphia-style city council votes? In ten of the 50 states (including in California) voter approval for local excise taxes is actually a formal requirement under state law.¹ Local tax efforts in these states are thus likely to require costly media campaigns in addition to political lobbying, which might seem to be a limiting constraint. Yet five of the seven successful efforts so far have come in such states, so voter approval does not have to be a barrier. A legal requirement for voter approval can even be a plus, since allowing the voters to decide gives politicians cover for starting the process. There is also a reduced risk of pre-emption by state legislatures once voters have formally approved.

7. Matching message with process

Whether through ballot or council vote, local tax advocates must take care to match their message with the process. This is revealed in Table 2, which compares enactment processes and tax characteristics in the 11 cities that attempted SSB taxes:

Table 2 shows that when the process is a ballot issue, success is more likely with a health framing than a budget framing. Even in heavily Democratic cities, voters (who are taxpayers) may hold a default preference against tax hikes designed to enable more government spending. The 2012 ballot issue in over-taxed El Monte failed badly in part

¹Beginning in 1978, California's voters amended the state constitution several times to require that local government tax increases be approved by local voters. See <http://www.lao.ca.gov/reports/2014/finance/local-taxes/voter-approval-032014.aspx> The states requiring voter approval for local excise taxes are California, Colorado, Iowa, Michigan, Missouri, New Mexico, Oklahoma, Rhode Island, South Dakota, and Wyoming.

because it was revenue-focused. The 2017 ballot issue in Santa Fe to raise revenue for pre-k education also failed. The politics changes with a city council vote, where more revenue to spend is highly attractive to sitting councils, and where a public health framing can actually carry political risk. Elected city councilors are wary of enacting top-down “nanny state” laws that seemingly impugn the ability of citizens to make wise personal choices. People object less to a choice-limiting tax if it comes through a vote by fellow citizens versus out-of-touch career politicians. All the successful ballot processes were framed as public health, while both successful council votes were framed as budget revenue. If the decision comes through city hall rather than the ballot box, pork barrel politics in the short run can get better enactment results than promises of improved public health in the long run.

Table 2 also shows that external financial support has been essential to success for both city hall and ballot box SSB tax efforts. The tiny city of Albany might seem an exception, but vigorous pro-tax media messages spilled in from nearby Oakland and San Francisco. External financial assistance is clearly not a sufficient condition for success, as indicated by the Santa Fe defeat, but it seems a necessary condition. Will there be enough of this external support available to sustain a pattern of future success if municipal SSB tax efforts proliferate?

The total number of campaigns needing external finance may eventually exceed the spending capacity of philanthropists, limiting the horizontal spread of these policies. Prior to the failed Santa Fe effort in 2017, the string of six straight tax victories in 2016 made it possible to imagine the industry would become demoralized and back away from trying to block more local taxes. In 2016, the ABA plus individual private companies such as Coca-Cola and Pepsi spent \$37.7 million lobbying and campaigning against soda taxes, which was more than twice the \$14 million they had spent in 2014, yet all of these blocking efforts had failed (Belluz, 2016). When a spending effort of roughly \$1.6 million finally produced another victory in Santa Fe in 2017, any likelihood of industry backing off from future battles was diminished. Yet even when the industry manages to win politically it can still lose commercially, because campaign messages will have reminded soda customers that the products of this industry are unhealthy to consume.

8. Vertical diffusion to the state Level?

Will the enactment of more local SSB taxes eventually trigger enactments at the state level? In some respects states should find it easier than local jurisdictions to enact dedicated SSB taxes, because their legal authority to do so is seldom in question, and because the risk of shoppers buying somewhere else would go down if taxes were statewide. Yet the recent record suggests that political success may actually be more difficult at the state level.

The Office of Legislative Research of the state of Connecticut has found that in 2013 and 2014 at least ten states considered imposing taxes on soft drinks (or candy), yet none enacted such taxes (Pinho, 2015). One reason has been far less Democratic Party dominance at the state level. Since some states do not register their voters by party, measuring party dominance at the state level is typically done by looking for simultaneous party control of both houses of the legislature plus the governorship. Following the November 2016

elections, only 6 of the 50 states exhibited this kind of “trifecta” Democratic control: California, Connecticut, Delaware, Hawaii, Oregon, and Rhode Island. In contrast, more than four times as many states (25) emerged as trifecta Republican, while the other 19 were mixed (Ballotpedia, 2016).

Even in trifecta Democratic states, and even following the Berkeley breakthrough in 2014, state level SSB tax efforts have so far failed. In the spring of 2015, the state legislature of Vermont (a trifecta Democratic state at the time) failed to pass a proposed 2 cents per ounce SSB excise tax. California is another trifecta Democratic state that has so far been unable to advance statewide SSB tax proposals. In the Sacramento legislature in April 2016, the sponsor of a two-cents-per-ounce SSB tax pulled the measure before a committee vote, knowing it lacked the needed support.

The beverage industry has shown its ability to launch ad hoc anti-tax campaigns as needed at the municipal level, but at the state level – in the legislature and at the statehouse – this industry maintains a permanent lobbying presence. In fighting against the California proposal, the beverage industry made \$500,000 in campaign contributions around the state and spent an additional \$413,000 in direct lobbying, and the California Chamber of Commerce and the California Restaurant Association also lobbied in Sacramento against the measure. Surveys revealed that 68 percent of California citizens actually favored an SSB tax of the kind the legislature was considering in 2016, but in Sacramento this industry lobbying mattered more (Koseff, 2016).

SSB taxes have been proposed in some non-trifecta Democratic states, suggesting that complete party dominance is not a prerequisite for making state level efforts, but so far such efforts have fallen short. In Illinois, a penny-per-ounce excise tax on SSBs was introduced in Springfield in 2011 but failed (Schmidt, 2014). The measure was then reintroduced in 2014, 2015, and 2016, with the same result. Illinois faced a growing state budget deficit of \$5 billion in 2016, and was tempted to raise state taxes to gain revenue, but the Republican governor pursued a pro-business, union-weakening agenda instead. In West Virginia in 2017, Democratic Governor Jim Justice proposed a penny per ounce tax on soft drinks to raise \$85 million annually but the state legislature took it out of the budget plan (Shade, 2017).

9. A moment of change?

The further spread of local SSB excise taxes could become an important moment of change. Seven local jurisdictions have acted so far, and each added example of political success at the local level may inspire imitators. Either as a new social movement (to improve health) or as a new political strategy (to increase revenue), local SSB taxes will probably continue spreading to fill more of the political space (as much as 40 percent of the nation) under local Democratic Party dominance. A demonstration effect from this local diffusion of taxes might eventually enable success at the state level, most likely beginning in a trifecta Democratic state. In other states it will be more difficult, and at the federal level neither popular ballots nor pork barrel political transactions are likely to favor SSB taxes any time soon.

Such a pattern paints an interesting picture of SSB tax policy in America today. It is commonly believed that state and local governments provide “laboratories” for testing policy innovations that later might be adopted by higher jurisdictions. As recently as 2010, when Congress enacted the Affordable Care Act, we saw an example of a Massachusetts state initiative (known as “Romneycare”) being copied at the national level as “Obamacare.” Yet if such vertical diffusion becomes more difficult after 2016, local SSB excise taxes may begin to look less like laboratory experiments and more like stand-alone demonstrations of divergent political preferences. In densely populated urban American cities and counties, where Democrats currently dominate, SSB excise taxes may continue to spread. Significant vertical diffusion to larger and less densely populated state jurisdictions will be more difficult. The legislative future for SSB taxes in America may thus emerge as layered and patchworked, but a significant point of departure just the same. What seemed unlikely at the local level before 2014 now seems quite probable.

For policy researchers, understanding the limits within federal systems of horizontal or vertical policy diffusion is an area demanding further study. We have seen here that the limits can be set by demographic factors such as population density, political factors such as party control, institutional factors such as legal requirements for voter approval, and also by the strategic choices of political leaders, private industry, and advocacy organizations. Models of policy choice within federal democratic systems omitting any of these variables are likely to be incomplete.

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Characteristics of cities attempting SSB excise Taxes, 2012–17. Source: <https://www.census.gov/quickfacts/table/PST045215/00> and city-stats.org/

Table 1

City and date of tax effort	Population (N)	Household income (median)	Poverty (%)	Non-whites (%)	High-School Graduates (%)	Registered or voting democratic (%)
<i>Unsuccessful</i>						
El Monte, CA 2012	113,475	\$38,906	24%	61%	57%	69%
Richmond, CA 2012	103,701	\$54,857	17%	69%	77%	68%
San Francisco 2014	805,235	\$78,378	13%	53%	87%	84%
Santa Fe 2017	67,000	\$53,365	18%	53%	71%	68%
<i>Successful</i>						
Berkeley, CA 2014	112,580	\$65,283	20%	41%	96%	79%
Philadelphia 2016	1,526,006	\$37,460	27%	63%	81%	83%
San Francisco 2016	864,816	\$78,378	13%	53%	87%	84%
Oakland, CA 2016	419,267	\$52,962	21%	65%	81%	79%
Albany, CA 2016	19,735	\$78,769	11%	45%	97%	79%
Boulder, CO 2016	107,349	\$58,062	23%	12%	96%	72%
Cook County, IL 2016	5,238,216	\$54,828	17%	34%	85%	78%

Table 2
Enactment processes and tax characteristics in cities attempting to enact SSB taxes 2012–2017.

City and date	Level of tax	Process	Tax revenue earmarked?	External aid for pro-tax campaign?	Tax intended primarily for revenue or health?
<i>Unsuccessful</i>					
El Monte, CA 2012	1 penny per oz	Ballot (76% opposed)	No	No	Revenue
Richmond, CA 2012	1 penny per oz	Ballot (67% opposed)	No	No	Public Health
San Francisco, 2014	2 penny per oz	Ballot (56% approved, but 2/3 required)	Yes, for “nutrition, physical activity, and health programs”	No	Public Health
Santa Fe 2017	2 penny per oz	Ballot (58% opposed)	Yes, to support “early childhood education”	Yes	Revenue
<i>Successful</i>					
Berkeley 2014	1 penny per oz	Ballot (76% approved)	No, but panel of experts would make recommendations	Yes	Public Health
Philadelphia 2016	1.5 penny per oz	Council Vote (13–4)	Yes, for universal pre-K education, community parks, libraries	Yes	Revenue
San Francisco, 2016	1 penny per oz	Ballot (62% approved)	No, but panel of experts would make recommendations	Yes	Public Health
Oakland, CA 2016	1 penny per oz	Ballot (62% approved)	No, but panel of experts would make recommendations	Yes	Public Health
Albany CA 2016	1 penny per oz	Ballot (71% approved)	No, but panel of experts would make recommendations	No	Public Health
Boulder 2016	2 penny per oz	Ballot (54% approved)	No, but panel of experts would make recommendations	Yes	Public Health
Cook County, IL, 2016	1 penny per oz	Board Vote (8–8, tie broken by Board President)	No	Yes	Revenue