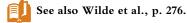
Sugar-Sweetened Beverage Taxation: Evidence-Based Policy and Industry Preemption



Nearly 40 countries and 8 US jurisdictions have implemented taxes on sugar-sweetened beverages (SSBs). Evidence of their effectiveness is accumulating from Berkeley, California, ^{1,2} Philadelphia, Pennsylvania,³ and Mexico.⁴ The public health rationale for SSB taxes includes the rising global pandemics of diabetes, cardiovascular disease, and obesity, together with clear evidence that SSB consumption contributes to these conditions and the previous success of taxation in reducing tobacco use and related diseases.

A SIMULATION MODEL FOR EVIDENCE-BASED POLICY

The ultimate goals of SSB taxes include reducing SSBrelated morbidity, mortality, and health care costs and generating revenues for public health, education, and other public services. Already, there is evidence that SSB taxes reduce consumption $^{1-4}$; however, it will take many years to quantify the observed long-term health and fiscal impacts of these taxes. Meanwhile, policymakers and voters must act to stymie the unprecedentedly high and still-rising prevalence of obesity and diabetes, against a backdrop of rising budget deficits. Simulation models may provide the best evidence of likely long-term outcomes. In this issue of AJPH, Wilde et al. (p. 276) present predicted cardiometabolic outcomes and costs from a microsimulation study of a

national \$0.01/oz SSB excise tax in the United States.

For society overall, this study projected that a national SSB tax would save \$45.68 billion in lifetime health care costs, assuming the tax is fully passed through to higher retail prices. These savings are more than 24 times the cost of implementing the tax, making the tax "highly cost-saving." These estimates are conservative given that they do not account for either prevention of noncardiovascular diseases (e.g., obesity-related cancers) or indirect savings from increased productivity, reduced absenteeism, and early retirement.

PROJECTED BENEFITS

The analysis by Wilde et al. not only adds to a growing number of national and international modeling studies predicting tremendous cost savings from SSB taxation, it breaks down predicted costs and benefits by stakeholder. The government would gain the most—a net \$106.82 billion from tax revenues and lower health care costs, findings that come at a time when the federal deficit is the highest it has been since 2012. A second and often-neglected stakeholder is employers, who provide health insurance for more than half the US population. Employers would save \$15.86 billion in health care costs, including employer-paid health insurance premiums. Third are consumers, who would pay the

SSB tax and, in turn, consume fewer SSBs and experience better health and lower health care costs. Although the tax was not projected to directly save consumers money, it was cost-effective, providing consumers a good value for health gains: "[C]osts of an SSB tax for cardiovascular health gains are comparable to other medical 'best buys' that consumers currently pay through individual premium and out-of-pocket health care costs." Lower-income consumers (e.g., those without health insurance), who tend to consume more SSBs than average, would also experience correspondingly better health gains and health care savings, providing further evidence that SSB taxes are not necessarily regressive.

As the authors point out, the model did not consider the likelihood that SSB revenues would fund public health or education programs, and thus may have underestimated consumer benefits. Polling suggests that to garner public support, a national SSB tax would need to fund such programs. Furthermore, existing SSB tax revenues are currently being used to fund public health, education, and equity. The nation's first SSB tax, in Berkeley, produced revenues for the school district's gardening and cooking program, diabetes and obesity prevention programs for low-income residents, oral health

services, and health promotion in African American and Latino communities, among others. In San Francisco, the mayor's proposed budget invests all of the city's projected SSB tax revenue (over \$20 million through fiscal year 2019) into programs that promote health equity-for example, by converting corner stores into healthy retailers, providing healthy food vouchers, and installing water stations in schools. Philadelphia's beverage tax is funding pre-kindergarten, community schools, and improvements to parks and libraries. Likewise, SSB taxes in Seattle, Washington, and Boulder, Colorado have been earmarked for health promotion and health equity. Thus far, SSB tax revenues in the United States have in fact been reinvested into communities.

BEVERAGE INDUSTRY COSTS AND ACTIONS

A final stakeholder considered by Wilde et al. is the beverage industry, which would bear the costs of implementing an SSB tax of \$0.92 billion. These costs, however, constitute a small fraction—2%—of the projected overall societal benefits of the tax (assuming SSB sales would shift to other beverages). A unique contribution of this study is the consideration of the distinct perspectives of multiple stakeholders who are expected to act differently on the basis of their interests.

Indeed, since 2009, industry has spent more than \$100 million to oppose state and local SSB policies such as taxation. In recent years, though, beverage industry efforts

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have shifted from defeating local legislation to suppressing local stakeholders—taxpayers and their representatives—from being able to cast a vote on SSB taxes. They have done so by pouring tens of millions of dollars into state legislation that preempts communities from deciding for themselves if they would like SSB taxes. Preemption is a strategy long used by the tobacco and firearms industry to prevent local antismoking laws and restrictions on firearms.⁵

Michigan, Arizona, and now California and Washington have preempted local SSB taxes. In California, home of the nation's first SSB tax, this was achieved by what lawmakers characterized as "blackmailing," holding "hostage," and sending a "ransom note" to Californians (https://nyti.ms/ 2ItStDX). These California lawmakers were describing how beverage companies spent millions on a ballot measure that could make it difficult for cities to function, and then offered to drop the initiative if lawmakers put a moratorium on local SSB taxes, which lawmakers did. In Washington, state preemption of local SSB taxes passed under the guise of a "Yes! To Affordable Groceries" ballot measure and more than \$20 million in beverage industry funding for the measure (https:// nyti.ms/2RuUjte).

Cities have long been the drivers of public health policy innovation, experimenting with strategies and generating evidence to inform policy scale-up. State preemption of health policies not only hinders consumer and government stakeholders from making decisions that directly affect their communities, it also slows scientific progress in understanding policy effects.

However, in states like California, preemption may ultimately hasten the scaling up of SSB taxes. Just days after California's moratorium on local SSB taxes, the California Dental Association and California Medical Association filed a 2020 ballot initiative for a statewide tax. SSB taxes are additionally supported by the American Heart Association, the American Cancer Society, the American Public Health Association, and other prominent health groups. Rigorous evaluations of SSB taxes should continue at all levels, and a state tax would provide a unique opportunity to evaluate an SSB excise tax that

cannot easily be avoided by crossing into another jurisdiction.

CONCLUSION

Modeling studies play an important role in predicting longterm outcomes of SSB taxes and in understanding distinct stakeholder perspectives, especially in an environment where SSB taxes and their evaluations may be rarer as a result of preemption. The CHOICES Project (http://choicesproject.org) has modeled the cost-effectiveness of SSB taxes at local, state, and federal levels,⁶ providing practical tools for decision-making. Likewise, the microsimulation study by Wilde et al. makes another important contribution to a growing body of literature that can help voters and policymakers make evidence-based decisions on future SSB taxation and preemption. AJPH

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Challenges and Opportunities for Modernizing the National Violent Death Reporting System

See also Haas et al., p. 255.

In this issue of *AJPH*, Haas et al. (p. 255) describe an effort to improve the coding of selfidentified sexual orientation and gender identity (SOGI) status among decedents in the National Violent Death Reporting System (NVDRS). As they illustrate, this is no easy task. Unlike most public health surveys for which living respondents can be queried, the NVDRS reporting process begins at death. Vital registrants at the local level are dependent on reports from law enforcement, coroners or medical examiners, social media and newspapers, and interviews with proxy reporters to piece together the victim's SOGI status at the time of death. We heartedly agree with the authors that the public health need for this information cannot

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CONFLICTS OF INTEREST

There were no author conflicts of interest.

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be underestimated.^{1,2} Over the past two decades, numerous studies have documented elevated risk for violent death among SOGI minorities arising from suicide attempts, depression, and antigay and antitransgender violence and victimization. But, as they note, linking the greater risk to reveal the burden of violent