ANNALS OF HEALTH LAW
Advance Directive

VOLUME 20 SPRING 2011 PAGES 112-123

Soda Taxes: A Missed Opportunity or An Untested Tactic?

*April Schweitzer**

I. INTRODUCTION

On March 23, 2010, President Obama signed comprehensive health reform, the Patient Protection and Affordable Care Act (PPACA), into law.[1] This Act aims to expand healthcare coverage, control costs, and improve healthcare delivery in the United States.[2] The Congressional Budget Office estimates the new law will cost approximately $938 billion over ten years.[3] Ultimately, the cost of the Act is being financed through savings from Medicare and Medicaid as well as new taxes and fees, including an excise tax on high-cost insurance.[4] However, the Senate Finance Committee held several roundtable discussions on financing comprehensive health care reform where they considered and ultimately rejected many other funding options, including a national soda tax.[5]

Proponents estimate that a new excise tax of one cent per twelve-ounce can of non-diet soft drinks, including both carbonated and non-carbonated beverages, would generate about $1.5 billion per year.[6] A tax of one cent per ounce, as suggested by former New York City Health Commissioner Tom Frieden and Yale obesity expert Kelly Brownell,

* Juris Doctor Candidate, Loyola University Chicago School of Law, Class of 2013. Ms. Schweitzer is a staff member of *Annals of Health Law*.

1. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119 (2010) (to be codified in scattered sections of 42 U.S.C.).
2. KAISER FAMILY FOUNDATION, FOCUS ON HEALTH REFORM: SUMMARY OF THE NEW HEALTH REFORM LAW 1 (2010), www.kff.org/healthreform/upload/8061.pdf.
3. *Id.* at 13.
4. *Id*.
5. *See* MICHAEL F. JACOBSON, CENTER FOR SCIENCE IN THE PUBLIC INTEREST, HEALTH CARE REFORM: *PREVENTION* IS ESSENTIAL 1 (May 12, 2009). The use of the terms "soda," "sugar-sweetened beverage," and "soft drink" are used interchangeably throughout this article in reference to any tax on the following carbonated and non-carbonated beverages: non-diet sodas, fruit and vegetable drinks, energy and sports drinks, iced teas and coffees, and flavored milk.
6. *Id.* at 2.

would generate approximately sixteen billon dollars per year.[7] Additionally, proponents further estimate that each penny tax per can of soda would lower soft drink consumption by about one percent.[8]

The first part of this article explores the links between sugar-sweetened beverages and obesity. The article goes on to describe the circumstances surrounding the proposal of a national soda tax and what tactics are now being utilized in individual states to curb sugar-sweetened beverage consumption since a soft drink tax was not included in the PPACA. The last part of the article focuses on the effectiveness of soda taxes. Although no single intervention will solve the obesity problem, soda taxes may provide incremental benefits and thus should be considered as a viable public policy.

II. THE LINK BETWEEN SUGAR-SWEETENED BEVERAGES AND OBESITY

Obesity is regarded as an epidemic in the United States due to a drastic increase in the rate of adult obesity over the last three decades.[9] There are serious long-term health effects from obesity, including type II diabetes, coronary heart disease, stroke, and cancer.[10] Some studies suggest that the health costs associated with obesity are greater than those associated with both smoking and drinking.[11] Medical costs for overweight and obese patients alone are estimated to be $147 billion, which amounts to 9.1 percent of all health care costs in the United States.[12]

Based on a systematic review of cross-sectional and longitudinal studies, the consumption of sugar-sweetened soft drinks has been linked to higher rates of obesity.[13] Thus, a case can be made for the need to reduce consumption of such beverages. Sugar-sweetened soft drinks contain "added, naturally derived caloric sweeteners, such as sucrose, high-fructose corn syrup, or fruit-juice concentrates, all of which have similar

7. *Id.* at 6.
8. JACOBSON, *supra* note 5, at 6.
9. Jason Fletcher et al., *Can Soft Drink Taxes Reduce Population Weight?*, 28 CONTEMP. ECON. POL'Y 1, 1 (Jan. 2010).
10. *Id.*
11. *Id.* According to the Campaign for Tobacco-Free Kids the total annual health care expenditures caused by smoking are $96 billion. According to the Marin Institute the annual health care expenditures for alcohol-related problems are $22.5 billion.
12. Kelly D. Brownell et al., *The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages*, 361 NEW ENG. J. MED. 1599, 1602 (Oct. 15, 2009).
13. *Id*. at 1599.

metabolic effects."[14] Such beverages are marketed widely to adolescents, and during the last decade–children consumed more sugar-sweetened beverages than milk.[15] Currently, these beverages account for between ten and fifteen percent of a child's caloric consumption each day.[16] The probability of a child becoming obese, increases by sixty percent for each extra glass of sugared beverage consumed per day.[17]

In the United States, soft drink consumption has been labeled as one of the major factors in the exploding rates of obesity.[18] Over the last fifty years soft drink consumption has increased by almost 500 percent.[19] One study suggests that cutting 100 calories per day could prevent weight gain in over ninety percent of people.[20] Such a decrease in caloric consumption could be obtained by consuming one fewer twelve-ounce can of sugar-sweetened soft drink each day.[21] Similarly, one would need to walk an additional mile each day to offset the caloric intake from the extra twelve-ounce can of soda.[22] Most would agree that consuming one less twelve-ounce soft drink would be easier than walking an extra mile each day. That is why Michael Jacobson, Executive Director of the Center for Science in the Public Interest, testified in favor of a tax on soft drinks as a way to decrease consumption, fund health reform, and support programs to promote healthy diets.[23]

III. CONGRESS CONSIDERS A SOFT DRINK TAX TO FUND HEALTH CARE REFORM

The proposal for a national excise tax on soft drinks was raised in May 2009 as part of the Senate Finance Committee's negotiations on health care reform.[24] Then in July 2009, President Obama mentioned the possibility of a national soda tax as part of an interview with Men's Health Magazine.[25]

As a result of the Senate Finance Committee considering a soda tax as a way to help

---

14. Brownell et al., *supra* note 12, at 1599.
15. Kelly Brownell & Thomas Frieden, *Ounces of Prevention - The Public Policy Case for Taxes on Sugared Beverages*, 360 NEW ENG. J. MED. 1805, 1805 (Apr. 30 2009).
16. *Id.* at 1805-06.
17. *Id.* at 1806.
18. Fletcher et al., *supra* note 9, at 1.
19. *Id.*
20. *Id.* at 2.
21. *Id.*
22. *Id.*
23. *See* JACOBSON, *supra* note 5, at 6.
24. Christine Spolar & Jospeh Eaton, *Food Lobby Mobilizes, As Soda Tax Bubbles Up*, HUFFINGTON POST, Nov. 4, 2009, http://www.huffingtonpost.com/2009/11/04/soda-tax-mobilizes-food-l_n_345840.html.

fund health reform – soft drink makers, supermarket companies, agriculture and the fast food business began pouring millions of dollars into campaigns opposing such a tax.[26] According to a report filed with the Senate Office of Public Records, in the first nine months of 2009, industry groups spent more than twenty-four million dollars working against the idea of a national excise tax on sugar-sweetened beverages among other legislative and advocacy initiatives.[27] Some activities included organizing petitions drives, asking Hispanic and African-American interest groups to write letters to their legislators and generating e-mail blasts characterizing the tax as unfair to low income people.[28] Additionally, print ads ran in publications, such as Roll Call, The Hill, and Politico, targeting lawmakers directly.[29] Approximately five million of the twenty-four million dollars reported was spent on an advertising campaign targeting lawmakers and promoting a coalition called Americans Against Food Taxes.[30]

The Americans Against Food Taxes group defines itself as a coalition of "responsible individuals, financially-strapped families and small and large businesses," and the membership list appears to be dominated by Burger King Corporation, Coca Cola, Pepsico, Domino's Pizza, and other similar corporations.[31] In September 2009, the group took out a full-page ad in The Washington Post, which was written as an open letter to Congress saying, "Don't tax our groceries."[32] Additionally, Americans Against Food Taxes ran commercials on cable networks, such as CNN, MSNBC, and Fox News, in a further effort to target legislators.[33]

In the end, the opposition's money was well spent because the proposal "ran into a committee with a lot of farm members," who are sympathetic to the food industry, and who ultimately killed the proposal before it ever made it out of the Senate Finance Committee.[34] The overall perception was that a national soda tax would not have

25. *Id.*
26. *Id.*
27. *Id.*
28. *Id.*
29. Natalie Zmuda, *Beverage Lobby Launches Campaign Against Soda Tax*, ADVERTISING AGE, Sept. 25, 2009, http://adage.com/article?article_id=139281.
30. Spolar & Eaton, *supra* note 24.
31. *Id.*
32. William Neuman, *Coke CEO Versus Obama on Soda Tax Proposal*, N.Y. TIMES, Sept. 17, 2009, http://www.cnbc.com/id/32896454/Coke_CEO_Versus_Obama_on_Soda_Tax_Proposal.
33. *Id.*
34. *See* Spolar & Eaton, *supra* note 24. Some have pointed out that the members of the Senate Finance

generated the kind of revenue needed to truly fund health reform.[35] Representative Bill Pascrell Jr., from New Jersey said that House lawmakers also considered including a soda tax as part of their health reform bill but ultimately decided against it because "[it] didn't look like we had the votes."[36]

Consequently, by November 2009, there was no longer a proposal for a national excise tax on soda in any of the health care reform bills under consideration in Congress.[37] However, the issue had gained traction, and because there was ultimately no national soda tax included in the PPACA, it is now up to the states to enact sugar-sweetened beverage taxes if they so choose. In May 2010, a White House task force on childhood obesity invited the states to do just that by suggesting that states experiment with taxing sugar-sweetened beverages as a way to reduce consumption.[38]

IV. TO TAX OR NOT TO TAX SOFT DRINKS AT THE STATE LEVEL

State-level soda taxes currently exist in thirty-three states.[39] The primary goal of such taxes thus far has not necessarily been to curb consumption but rather to generate revenue.[40] While there are those who argue that the government should not interfere in the market and that products and prices will change when consumers demand more healthy options, most economists agree that government intervention is necessary when there are "market failures."[41] Several such market failures exist in the case of sugar-sweetened beverages, including a lack of public understanding about the link between soft drink consumption and health, shortsighted decision-making, and externality costs.[42]

First, since many people do not fully understand the link between consumption of soft drinks and health consequences, consumption decisions are made without adequate

---

Committee are especially sympathetic to the food industry: Democratic Chairman Max Baucus is from Montana, a large producer of sugar beets, and ranking member Republican Chuck Grassley, comes from Iowa, the nation's largest producer of corn which is a key ingredient in high fructose corn syrup used in sugar-sweetened beverages.

35. *Id.*

36. Neuman, *supra* note 32.

37. Spolar & Eaton, *supra* note 24.

38. Sal Gentile, *As White House tackles obesity, lawmakers eye soda as culprit*, NEED TO KNOW ON PBS, May 11, 2010, http://www.pbs.org/wnet/need-to-know/health/as-white-house-tackles-obesity-lawmakers-eye-soda-as-culprit/566/.

39. Brownell et al., *supra* note 12, at 1599.

40. Fletcher et al., *supra* note 9, at 3.

41. Brownell et al., *supra* note 12, at 1601.

42. *Id.*

information.[43] Such decisions are further distorted due to extensive marketing and advertising campaigns that tout the benefits of consumption. For example, "the National Cancer Institute only spends about one million dollars annually on the media component of its 5-A-Day campaign to encourage people to consume more fruits and vegetables."[44] Conversely, each year the beverage industry spends more than six hundred times that amount solely on advertising.[45] Coke and Diet Coke alone spend approximately $154 million on advertising each year.[46]

A second failure is the result of shortsighted decisions, which provide short-term gratification and long-term harm.[47] The third market failure has to do with externality costs.[48] One such externality cost is the almost forty billion dollars spent annually on issues related to obesity by Medicare and Medicaid at the expense of taxpayers.[49]

V. WHY SOFT DRINK TAXES ARE BEING PROPOSED IN THE FIRST PLACE

Soft drink taxes have been proposed for several reasons. First, soft drinks are the single largest contributor of energy intake at over seven percent.[50] Additionally, soft drinks are high in free sugars, which ultimately reduce appetite control and lead to weight gain.[51] Further, "the increase in soft drink consumption has mirrored the increase in obesity rates."[52]

Currently, the financial crisis has sparked more interest from officials in the states who need to make up for lost tax revenues.[53] The Center for Science in the Public Interest released a study in which the results concluded states could raise an estimated ten billion dollars a year by adding a seven-cent tax to a twelve-ounce can of sugar-sweetened soft drinks.[54] For example, $139 million could be generated in Arkansas, New York could

---

43. *Id.*
44. Michael F. Jacobson & Kelly Brownell, *Small Taxes on Soft Drinks and Snack Foods to Promote Health*, 90 AM. J. PUB. HEALTH 854, 854 (June 2000).
45. *Id*.
46. *Id*.
47. Brownell et al., *supra* note 12, at 1601.
48. *Id.* An externality is a cost to a party that is not directly part of the transaction.
49. Brownell & Frieden, *supra* note 15, at 1806.
50. Fletcher et al., *supra* note 9, at 1.
51. *Id.*
52. *Id.*
53. Spolar & Eaton, *supra* note 24.
54. *Id.*

raise $937 million, and $1.8 billion could be generated in California from such a tax.[55]

One objection to a tax on sugar-sweetened beverages is that it would be regressive.[56] Similar arguments were made about tobacco taxes, but proponents successfully argued that the "poor face a disproportionate burden of smoking-related illnesses, that nearly all smokers begin to smoke when they are teenagers, and that both groups are sensitive to price changes."[57] Similarly, the poor also suffer from illnesses that are a consequence of both unhealthy diets and brand loyalties for sugar-sweetened beverages engrained since childhood.[58] However, sugar-sweetened beverages are not necessary for survival, and an alternative (i.e., water) is available at little or no cost; hence, a tax that shifted intake from sugar-sweetened beverages to water would benefit the poor both by improving health and by lowering expenditures on beverages.[59]

Another objection is that imposing a tax on sugar-sweetened beverages fails to solve the obesity epidemic and will affect those people who consume even small amounts of such beverages.[60] While this may be true, reducing caloric intake by just one to two percent annually could potentially have a notable impact on health in all age groups, and there would be less financial burden on those who consumed small amounts of sugar-sweetened beverages.[61]

Given the possible effect on sales, the beverage industry has launched opposition campaigns in every state that has considered a sugar-sweetened beverage tax and can be expected to continue to do so just as the tobacco industry has continued to oppose tobacco taxes.[62] When an eighteen percent sales tax on sugar-sweetened beverages was being considered in New York, PepsiCo threatened to move its corporate headquarters.[63] Likewise, the tobacco industry has continually opposed policy changes by financing front groups with names that suggest grassroots community involvement just as the beverage

55. Brownell et al., *supra* note 12, at 1603.
56. Lisa M. Powell & Frank J. Chaloupka, *Food Prices and Obesity: Evidence and Policy Implications for Taxes and Subsidies*, 87 MILBANK Q 229, 247 (2009).
57. Brownell et al., *supra* note 12, at 1603.
58. *Id.*
59. *Id.*
60. *Id.*
61. *Id.*
62. Brownell et al., *supra* note 12, at 1603.
63. *Id.*

industry has done by creating the Americans Against Food Taxes coalition.[64] In this past election cycle, the American Beverage Association spent more than one million dollars gathering signatures to get Initiative 1107 to repeal the soda tax in Washington State.[65] Although the tactics differ from state to state, the message is typically the same: "Don't lay the blame for obesity solely on soda."[66]

Public support for food and beverage taxes to address obesity has increased steadily from "thirty-three percent in 2001 to forty-one percent in 2003 and then to fifty-four percent in 2004."[67]

VI. SALES TAXES V. EXCISE TAXES

The most common way soft drinks are currently taxed is through a sales tax that is added as a percentage of the retail cost.[68] Unfortunately, there are several disadvantages to solely applying a sales tax. For example, such taxes may encourage consumers to simply purchase cheaper brands thereby forfeiting any calorie reduction.[69] Additionally, since a sales tax is added at the register some consumers will only become aware of the tax after deciding to purchase the item and lastly, the sugary syrups used in fountain drinks continue to be untaxed.[70]

On the other hand, excise taxes are more likely to affect consumer-purchasing decisions because wholesalers and producers will pass the extra cost along to retailers and ultimately to consumers.[71] Additionally, taxes levied on producers and wholesalers are easier to enforce because of the smaller number of businesses that would be required to comply.[72]

Further, consumers may be unaware of state sales taxes given that they are typically not apparent on shelf prices, and sales receipts only list the total sales tax paid not the sales tax on individual products.[73] Recent evidence supports the contention that many

64. *Id.*
65. Joey Peters, *Soda Taxes Fizzle in the Wake of Industry Lobbying*, THE WASHINGTON POST, July 13, 2010, at A-Section.
66. *Id.*
67. Brownell et al., *supra* note 12, at 1603.
68. *Id.* at 1602.
69. *Id.*
70. *Id.*
71. Brownell et al., *supra* note 12, at 1602.
72. *Id.*
73. Jessica Todd & Chen Zhen, *Can Taxes on Calorically Sweetened Beverages Reduce Obesity?*, 25

customers may not be aware of sales taxes on items when the tax is not included in the shelf price, and that "the economic incidence of the tax may be dependent on whether the tax is imposed on the manufacturer, retailer, or consumer."[74] Moreover, research suggests that specific excise taxes levied based on particular units provide more incentive to producers to lessen the amount of sugar per unit than a sales tax.[75]

VII. WHAT EXACTLY IS A SUGAR-SWEETENED BEVERAGE?

Most state sales taxes apply to caloric and diet carbonated beverages, but exclude other calorically sweetened beverages, such as fruit drinks, flavored milk, or sweetened coffees.[76] Thus, the tax can be avoided by simply substituting the untaxed products for taxed carbonated beverages while still consuming the same amount of calories.[77] Under the proposal floated by the Senate, sugar-sweetened beverages would have included "a variety of carbonated and non-carbonated beverages, such as non-diet sodas, fruit and vegetable drinks, functional drinks such as energy and sports drinks, iced teas and iced coffees, and flavored milk and dairy drinks," but not beverages with non-caloric sweetener.[78]

One controversial issue among states stems from the use of non-caloric sweeteners. Even though no negative health effects have been consistently demonstrated, some are concerned that diet beverages will ultimately increase calorie consumption by justifying consumption of other foods.[79] Currently, most researchers do not support taxing beverages with non-caloric sweeteners, but instead recommend additional research to determine whether taxing such products might be good policy in the future.[80]

VIII. THE EFFECTIVENESS OF SOFT DRINK TAXES

According to the studies that have been conducted thus far, it appears as though soft drink taxes do help to curb obesity, yet whether this decrease is significant is still up for

CHOICES THE MAGAZINE OF FOOD, FARM AND RESOURCE ISSUES (2010), http://www.farmdoc.illinois.edu/policy/choices/20103/2010307/2010307.html.

74. *Id.*

75. Brownell et al., *supra* note 12, at 1602.

76. Todd & Zhen, *supra* note 73.

77. *Id.*

78. Carrie Budoff Brown, *Smokers, Diet-Soda Drinkers Spared?*, POLITICO, May 18, 2009, http://www.politico.com/news/stories/0509/22675.html.

79. Brownell et al., *supra* note 12, at 1603.

80. *Id.*

debate. For example, one study found that an increase of one percentage point in the state soft drink tax rate would lead to a decrease in body mass index (BMI) of .003 points.[81] The same study also discovered, the eighteen percent increase proposed in New York in 2008, "may not have a substantial effect on population weight."[82] Such results suggest that taxes may influence behavior but that the changes are likely not drastic enough to translate into significant changes in population weight.[83]

However, those under the age of eighteen, those with lower-incomes, or those who already have elevated BMIs are more likely to respond to price changes than older, healthier-weight or higher-income individuals.[84] In particular, one study found that "the BMI of children living below the federal poverty level was about fifty percent more sensitive to fruit and vegetable pricing than was the BMI of higher-income children."[85] This is relatively consistent with an another study which found the effects of sales taxes have the greatest impact on children who are heavier, come from low income families, are African American or who watch a lot of television.[86] These results were particularly significant for children who attend schools where sugar-sweetened beverages are available.[87]

There a number of events that must take place in order to link soft drink taxes to a decrease in obesity. First, the tax increase must actually result in higher prices for consumers.[88] Second, the higher prices must truly reduce consumer consumption and third, the decrease in consumption needs to translate into a reduction in obesity.[89] There is some evidence of each effect individually, but there is little research about whether all of the effects actually work together to decrease obesity. One study found that "an increase in soft drink tax rates leads to an increase in the price of soft drinks."[90]

---

81. Fletcher et al., *supra* note 9, at 7.
82. *Id.* at 2.
83. *Id.* at 8.
84. Frank J. Chaloupka et al., *Sugar-Sweetened Beverage Taxes and Public Health*, ROBERT WOOD JOHNSON FOUNDATION (July 2009), *http://www.healthyeatingresearch.org/images/stories/her_research_briefs/ssb_taxes_and_public_health_her research_brief_7.31.09_final.pdf.*
85. *Id.*
86. Roland Sturm et al., *Soda Taxes, Soft Drink Consumption, And Children's Body Mass Index,* 29 HEALTH AFF. 1052, 1057 (2010).
87. *Id.*
88. Fletcher et al., *supra* note 9, at 3.
89. *Id.*
90. *Id.*

Additionally, other studies have found that a ten percent tax increase will reduce the consumption by two percent.[91]

Taken together, it may be a fair assumption that if soft drink taxes reduce consumption and consumption is related to obesity then soft drink taxes may reduce obesity. However, the availability of substitutes may make the taxes less effective.[92] An increase in sugar-sweetened beverage taxes will be less effective in reducing consumption and thereby fighting obesity if there are close substitutes with similar caloric content readily available.[93] Additionally, other foods, such as cookies or chips could also fill the caloric void left from decreasing consumption of sugar-sweetened soft drinks.[94]

IX. CONCLUSION

Even though soft drinks are the single largest contributor of energy intake in the United States over the past decade, soft drinks only account for about seven percent of total energy intake.[95] Consequently, only modest changes in population weight can be expected due to decreases in consumption as a result of tax increases.[96] As one may guess, the higher the tax imposed, the higher the reduction in BMI, but even a fifty-eight percent increase in soft drink taxes would only decrease the mean BMI in the United States by 0.16 points.[97]

Undoubtedly, a tax on soft drinks will raise billions of dollars in tax revenue for the states. A tax levied per ounce would be easiest to administer, and although it is more complicated, it is possible to levy a tax based on sugar content.[98] Additionally, an excise tax that incorporates a higher price visible to consumers will be more effective than a sales tax which may not allow the consumer to see the true price until after the purchasing decision has been made.[99]

If the money generated from a tax is used to help fund additional obesity-reduction programs, such as nutrition education, the tax will likely be more effective than if used as

---

91. *Id.*
92. Fletcher et al., *supra* note 9, at 4.
93. *Id.*
94. Todd & Zhen, *supra* note 73.
95. Fletcher et al., *supra* note 9, at 9.
96. *Id.*
97. *Id.* at 10.
98. Sturm et al., *supra* note 86, at 1058.
99. *Id.*

a way to increase the monetary cost of consumption alone.[100] Any tax on a specific food or group of foods can only address one small aspect of the obesity epidemic. "Diet choices are the result of a complex set of household and individual decisions, reflecting not only economic factors but also social and cultural norms."[101] Americans currently consume about 250 to 300 additional calories each day than several decades ago with almost half of the additional calories coming from sugar-sweetened beverages.[102] Although no single intervention will solve the obesity epidemic, soda taxes may provide incremental benefits and thus should be considered as a viable public policy.

---

100. Todd & Zhen, *supra* note 73.
101. *Id.*
102. Brownell & Frieden, *supra* note 15, at 1806.