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# TAXING HIGH-SUGAR SOFT DRINKS COULD HELP PAY FOR HEALTH CARE REFORM

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By establishing a tax on high-sugar soft drinks, Congress could help finance health care reform that extends health insurance to all Americans and slows the growth of health care costs, while also improving Americans' health. This paper, which is part of a series of papers on proposals to help pay for health reform, outlines issues related to such a tax. Depending on how it is designed, such a tax has the potential to raise as much as \$10 billion a year to help pay for health care reform.

Mounting evidence indicates that consumption of high-sugar drinks has increased sharply in recent years and is likely to have contributed markedly to increased obesity, which results in higher health costs and increased morbidity. American children aged 2 to 5 are twice as likely to be overweight as they were in 1970, and those aged 6 to 19 are three times as likely to be overweight; more than 9 million children and adolescents are now considered overweight.<sup>1</sup> A meaningful tax on high-sugar soft drinks should reduce consumption, helping to fight obesity and its attendant private and public costs.

## Why the Tax Makes Sense

A growing body of health research and a recent article in the highly regarded *New England Journal of Medicine* make a compelling health case for a federal tax on soft drinks:<sup>2</sup>

- 1. Increased consumption of sugary drinks contributes significantly to obesity.** Americans consume about 250-300 more daily calories today than they did several decades ago, and nearly half of this increase reflects greater consumption of high-sugar soft drinks. Per capita consumption of such drinks nearly *tripled* between 1977-78 and 2000.<sup>3</sup> Research indicates that when people increase their caloric consumption of beverages, they tend not to reduce their food intake, so their overall caloric consumption rises.

<sup>1</sup> "Adolescent Overweight and Future Adult Coronary Heart Disease," *New England Journal of Medicine*, December 6, 2007, <http://content.nejm.org/cgi/content/full/357/23/2371#F1>.

<sup>2</sup> Kelly D. Brownell and Thomas R. Frieden, "Ounces of Prevention — the Public Policy Case for Taxes on Sugared Beverages," *New England Journal of Medicine*, April 30, 2009, <http://content.nejm.org/cgi/reprint/NEJMp0902392.pdf?resourcetype=HWCIT>.

<sup>3</sup> *Ibid.*

In 2003, the average American consumed nearly a gallon of soft drinks each week. According to a 2001 USDA study, 32 percent of adolescent girls and 52 percent of adolescent boys consume three or more eight-ounce servings of soda per day, which translates into well over a gallon per week.

In addition, a major Johns Hopkins study found that while adults can lose weight by lowering their calorie intake from beverages or solid foods, they generally *maintain* that weight loss only if they lower their calorie intake from sugar-sweetened beverages.<sup>4</sup>

- 2. Obesity contributes to morbidity and premature death.** The increase in obesity, to which increased soft drink consumption appears to have contributed significantly, leads to higher incidence of various diseases. According to the Centers for Disease Control and Prevention, obesity raises the risk of heart disease, diabetes, stroke, hypertension, and certain cancers, as well as other diseases.

In addition, children who are overweight are more likely to develop diabetes, hypertension, respiratory problems, and orthopedic problems later in life. A study published in the *New England Journal of Medicine* estimated that the increase in adolescent obesity as of 2000 will cause a 6 to 19 percent increase in American deaths from heart disease by 2035.<sup>5</sup>

Another study found that women who consumed one or more soft drink servings per day were twice as likely to develop diabetes during the eight-year study as women who consumed less than one serving per month.<sup>6</sup>

- 3. Increased obesity drives up the nation's health care costs.** Extensive soft-drink consumption doesn't just harm individuals. It also imposes costs on the health care system and taxpayers. Researchers at Emory University have estimated that the "rising prevalence of obesity and [the] higher relative per capita [health] spending among obese Americans accounted for 27 percent of the growth in real per capita [health] spending between 1987 and 2001."<sup>7</sup> A separate Emory study found that increased obesity accounted for 15 percent of the nation's increased Medicare costs between 1987 and 2002.<sup>8</sup>
- 4. A meaningful soft drink tax would improve health.** A tax on high-sugar soft drinks would reduce consumption of such beverages. A 10 percent price increase in these drinks would cut consumption by 7.8 percent, according to one estimate.<sup>9</sup> Lower consumption, in turn, would improve health outcomes.

## Regressivity Argument Ignores Important Facts

Some critics may argue that a tax on high-calorie soft drinks would be regressive, falling disproportionately on lower-income people. But low-and moderate-income people would *benefit* disproportionately from the universal

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<sup>4</sup> "Reduction in consumption of sugar-sweetened beverages is associated with weight loss: The PREMIER Trial," *American Journal of Clinical Nutrition*, April 1, 2009, <http://www.ajcn.org/cgi/content/abstract/89/5/1299>.

<sup>5</sup> "Adolescent Overweight and Future Adult Coronary Heart Disease."

<sup>6</sup> "Sugar-Sweetened Beverages, Weight Gain, and Incidence of Type 2 Diabetes in Young and Middle-Aged Women," *Journal of the American Medical Association*, August 25, 2004, <http://jama.ama-assn.org/cgi/content/full/292/8/927>.

<sup>7</sup> See "The Impact of Obesity on Rising Medical Spending," *Health Affairs*, October 20, 2004, <http://content.healthaffairs.org/cgi/reprint/hlthaff.w4.480v1>.

<sup>8</sup> "The Rise In Spending Among Medicare Beneficiaries: The Role of Chronic Disease Prevalence and Changes in Treatment Intensity," *Health Affairs*, August 20, 2006, <http://content.healthaffairs.org/cgi/reprint/25/5/w378>.

<sup>9</sup> The estimate, from Yale University's Rudd Center for Food Policy and Obesity, is cited in Brownell and Frieden.

health care that this tax would help fund, since they make up the bulk of the uninsured. Moreover, to the extent that lower-income consumers responded to the tax by buying fewer high-calorie soft drinks, their health would benefit.

## States' Experience with Soda Taxes

Many states tax soda. While only 14 states levied a sales tax on food for home consumption as of 2007, 39 states imposed a sales tax on at least some soda purchases. In some of these states, the tax is simply part of the sales tax that applies to food; in others, it is a separate or a higher tax. Some 28 states impose a higher sales tax on vending machine soda sales (or on vending machine sales generally) than on food generally, and 21 states impose a higher tax on soda purchased at grocery stores than on other food purchases.<sup>10</sup>

A handful of states — mostly in the South — impose *excise* taxes on soft drinks at the wholesale level. For example, Arkansas has an excise tax on soft drinks and uses the proceeds to help fund Medicaid. The Arkansas tax is paid by: 1) distributors, manufacturers, and wholesalers that sell soft drinks (or syrups and powders used to make soft drinks) to retailers in the state; and 2) retailers that purchase soft drinks from unlicensed distributors, manufacturers, and wholesalers. The entities that pay the tax are licensed by the state and report and remit taxes on a monthly basis. In these states, the tax is embedded in the purchase price that consumers pay, rather than added at the check-out counter.

## Design Issues to Consider

Policymakers considering a federal tax on high-sugar soft drinks must decide what type of tax to establish, what types of beverages it should apply to, and what size it should be.

### Should the Tax Be Based on the Soft Drink's Value or Volume?

Two types of taxes are possible at the federal level: one based on the soft drink's value (known as an *ad valorem* tax) and one based on its volume (essentially an excise tax). The latter — specifically, an excise tax imposed at the wholesale level, similar to the Arkansas tax described above — is preferable, for several reasons:

- An excise tax would be more effective at discouraging consumption because it would show up in the product's purchase price. An *ad valorem* tax, in contrast, likely would be assessed at a retail cash register, *after* the consumer had already decided to make the purchase.
- An *ad valorem* tax could have the unintended consequence of encouraging bulk purchases of soft drinks, since the lower cost per ounce of beverage would result in a lower tax amount as well.
- An excise tax would be similar to existing federal excise taxes. The Treasury Department's Alcohol and Tobacco Tax and Trade Bureau (TTB) administers federal tobacco taxes by issuing permits to tobacco manufacturers, importers, and exporters; TTB could also administer a soft drink tax by instituting a parallel system of permits for manufacturers, importers, and exporters of soda and soda products. In contrast, an *ad valorem* tax could create tensions between the federal government and the states because sales taxes added at the point of the retail purchase have traditionally fallen under the purview of state governments.

### What Beverages Should It Cover?

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<sup>10</sup> "State Sales Tax Rates for Soft Drinks and Snacks Sold through Grocery Stores and Vending Machines, 2007," 2008, *Journal of Public Health Policy*.

The goal of the proposal is to fight obesity by reducing consumption of high-sugar soft drinks. Soda is a primary target. But the tax should also apply to heavily sweetened “sport drinks,” as well as to powders and syrups used to make soda and sweetened iced tea.

Manufacturers of highly sweetened fruit drinks may ask Congress to exclude them from the tax by claiming that these are “healthy” high-sugar beverages. But because of these drinks’ very high calorie levels, they, too, should be subject to the tax. This would be consistent with federal regulations governing the WIC program, which disallow any fruit drinks that are not 100 percent unsweetened fruit juice.

In defining the categories of drinks the tax would cover, policymakers should heed the advice of the medical community to the greatest extent possible.

### What Size Should It Be?

Health concerns and the need to finance health care reform legislation both argue for a meaningful tax, which will raise more revenue and likely produce larger health gains than a tax that is too small.

An excise tax of a penny per ounce would reduce soft-drink consumption by more than 10 percent, according to one analysis,<sup>11</sup> although some other analysts think such a tax would not be sufficient to have that effect.<sup>12</sup> A penny-per-ounce tax would raise roughly \$10 billion a year, based on a Center for Science in the Public Interest estimate of a similar proposal,<sup>13</sup> although this appears to be a conservative estimate. CBO estimated that a much smaller alternative — a tax of three cents per 12 ounces of beverage — would raise about \$5 billion per year.<sup>14</sup>

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<sup>11</sup> See Brownell and Frieden.

<sup>12</sup> Some researchers such as Barry Popkin of the University of North Carolina argue that this level of tax would not be sufficient to affect consumption. Policymakers thus might want to consider setting the tax somewhat higher.

<sup>13</sup> “Soft Drinks: Time to Tax,” March 2009, Center for Science in the Public Interest.

<sup>14</sup> “Budget Options Volume I: Health Care,” Congressional Budget Office, December 2008, <http://www.cbo.gov/ftpdocs/99xx/doc9925/12-18-HealthOptions.pdf>.