Testimony of Kevin Dietly[1]
On Behalf of the Beverage Association of Vermont
In Opposition to H.24 and H.235

Chair Ancel and members of the Committee, I appreciate the opportunity to provide an economic perspective on the impact of a proposed tax on certain beverages in Vermont. I am a partner in an economic and financial consulting firm based in Westford, Massachusetts and have conducted extensive research on beverage taxes for clients in the beverage industry around the US. Northbridge also provides consulting services to the federal government, state agencies around the country including Vermont, trade associations, and corporations.

The proposed tax on sugar-sweetened beverages (SSBs) mimics dozens of proposals that surfaced several years ago as "silver bullets" to reduce calories in the diet and provide health benefits for overweight people. Neither economic nor scientific evidence support the efficacy of taxes for improving health outcomes.

In the end, these are simply revenue-raisers, typically designed as hidden taxes, to raise money from food shoppers to fund various new and existing state programs. With the exception of a tax enacted in Berkeley, California this past November and whose implementation has been delayed, there are no similar taxes in effect anywhere in the US. Dozens of state legislatures and millions of voters have rejected these taxes as regressive and ineffective policy tools. I encourage you to do the same.

Summary

- Beverage excise taxes are hidden taxes and as such may have no impact on consumer behavior beyond driving up the price of groceries generally.

- Beverage taxes are regressive – more than half of the revenue from such a tax would come from households earning less than $53,000 per year.

- Vermont businesses, especially small border stores and restaurants, would bear the brunt of the economic impact. Beverage industry-related job losses could reach 860 with $40 million in lost wages.

- Consumption of taxed beverages is already declining sharply and has been for years. If sweetened beverages were a major contributor to obesity, one would expect marked improvements in obesity rates, but this has not occurred.

- The economic literature does not connect taxes with meaningful changes in body mass index or health outcomes. Further the literature suggests that more complete analysis of substitution effects in the wake of a tax would show offsetting increases in calories from consumption of other high calorie and/or high fat products not subject to the tax.

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Beverage Taxes – Hidden, Regressive, and Burdensome

Levying a tax on sweetened beverages is unprecedented although the Berkeley tax will apparently take effect this month. No other state imposes any tax based on calories or sweetener use in products. In fact only two states have excise taxes on nonalcoholic beverages at all – Arkansas (approximately 0.16¢ per oz on packaged beverages, slightly higher on fountain drinks, imposed in 1992 as a supplemental Medicaid funding source) and West Virginia (approximately 0.06¢ per oz and imposed in the 1950s to fund construction of a medical school).

Voters have rejected a number of proposed beverage taxes over the past several years. Direct citizen votes in Telluride, Colorado and two California cities in recent years soundly rejected similar beverage tax proposals. In Telluride the tax fell by a 2:1 margin in 2013, a tax failed by a similar margin in 2012 in Richmond, California in the Bay Area, and the same year 77 percent opposed a proposed tax in El Monte, a Los Angeles suburb. In two other statewide votes, citizens reversed legislative action to tax beverages. Washington State enacted a temporary 0.16¢ per oz tax on packaged, carbonated soft drinks effective in July 2010, but voters repealed the tax that November. A similar fate befell a beverage tax passed in Maine in 2008; voters overturned that tax in a referendum the same year.

About Hidden Taxes

This bill would assess the tax at the producer or distributor level. A producer or distributor tax becomes embedded in the cost of producing and distributing beverages, just like higher insurance premiums or fuel costs. Wholesale and retail prices are then set given those new costs – consumers would likely not see higher prices solely on the affected products, but on all items sold in the store. The bread, diapers, detergent, and deli items might all may carry a little bit of the higher cost brought on by the tax.

If that scenario played out, the tax would not have any effect on consumer behavior – other than to force shoppers to pay more for groceries overall and find themselves with less disposable income at the end of the day. If there is no change in behavior, the tax is simply a money grab.

Even if the tax were passed through solely in beverage prices, it is very unlikely that retailers would choose to put different prices on regular and diet versions of the same product. Consider 2-liter soda bottles – one diet and one regular. If the retailer is selling diet for $1.49 would he sell the regular soda for $2.84 ($1.49 plus $1.35 for the tax)? That is highly unlikely. More likely, both products would increase to $1.99 or similar price point, meaning the cost of the tax is spread across more products than those that are subject to the tax.

The same argument applies to fountain drinks in a restaurant. Pricing has always been and will continue to be consistent for diet and regular versions of the same products. I have little doubt that consumers would ultimately pay the tax through higher prices for many products that they buy, but the impact of that tax would not be limited only to the taxed items. This market reality illustrates a key point: using tax policy to direct consumer behavior to match the will of the proponents is a clumsy and ineffective tool.

A Regressive Tax

An analysis by the Congressional Research Service found that a proposed national beverage tax would be borne disproportionately by those with low and moderate incomes. These households spend a significantly higher share of their income on food and beverages at home. According to our own analysis of the Consumer Expenditure Survey of the Bureau of Labor Statistics, half of the burden of a beverage tax (*i.e.*, half of the revenue raised by the tax), would come from households earning less than $53,000 per year. The share of household income used to buy these beverages differs by nearly eight-fold between the lowest and highest income quintiles.

The Tax is Large and Burdensome

As illustrated in the example above, the burden of a tax as large as 2¢ per ounce can easily double the price of a product. A gallon of iced tea selling for $1.99 would have a $2.56 tax. The tax would translate into $2.88 on a 12-pack of soda (the most common consumer package sold). For a 12-pack selling for $4 that tax would represent a 72 percent price increase. The two-liter soda example above illustrated a 90 percent increase from the tax. These are very harmful price increases that hit low and middle-income consumers hard amidst an environment where food prices are already climbing.

Impacts on Vermont Businesses

This tax would be bad for Vermont businesses including many beyond the soft drink industry. In his assessment of a proposed national beverage tax, Dr. Robert Hahn of the Georgetown Center for Business and Public Policy commented that even a much lower tax "would likely result in a significant short-term reduction in economic output in the industries currently involved in the production of beverages…"[2]

While my testimony primarily focuses on the beverage industry – those that produce and distribute the affected beverages – the marketplace impacts will be felt much more on the retail side. These retailers face the prospect of dramatically higher wholesale prices and must determine how to pass those costs on without driving away customers. The burden would be widely shared by the largest food stores down to mom and pop stores, especially those near the border, plus restaurant and food service establishments including theaters, pizza shops, and others. And, of course, the smaller the operation, the more difficult it would be for them to absorb the impacts of the tax.

Vermont's Beverage Industry

The beverage industry, its suppliers, and other businesses that depend on beverage sales account for 3,000 Vermont jobs, paying $140 million in wages.[3] These totals do not include the retail and food service sectors that sell beverages and that would see their sales decline as a result of the tax as well.

[2] "The Potential Economic Impact of a U.S. Excise Tax on Selected Beverages," Robert Hahn for the American Beverage Association, August 31, 2009, www.nofoodtaxes.com/economic-impact-of-a-proposed-beverage-tax/. That analysis examined taxes of 0.25¢ per oz up to 0.83¢ per oz.

[3] John Dunham and Associates, Inc. for the American Beverage Association, 2012 data.

Preliminary Economic Modeling

Higher prices on the taxed beverages would dramatically reduce sales of these products in Vermont. Even if the tax were spread to other food and beverages, as it would likely be, there would still be some sales impact. Lower sales result from a combination of three possible consumer responses to the tax:

- Purchase untaxed or lower cost beverages or foods (substitution effect). Note that some of these substitutes may contain more sugar and/or fat than the taxed items.

- Buy fewer beverages without substituting an alternative (income effect)

- Buy beverages outside Vermont to avoid the tax (cross-border effect)

Economic modeling using demand analysis (how consumers respond to higher prices) captures the substitution and income effects. Projecting employment losses to Vermont beverage companies and suppliers proportional to sales losses we would expect:

- 860 jobs lost in Vermont – 170 among producers and distributors of beverages and 690 among suppliers of goods and services (ranging from vehicle maintenance to restaurant supply, and business insurance) and among businesses that depend on the spending of workers in the beverage industry and its suppliers. Job loss estimates *do not* include retailers, who would be hardest hit from cross-border purchases to avoid the tax.

- $40 million in lost wages across these 860 workers

- $170 million in lost economic output from these sectors

These losses are modeled using 2012 data on the Vermont beverage industry referenced above and a comparison of the tax to the average retail prices per gallon for various taxed product categories. The percentage increase in the price (assuming that all of the tax is passed through on the price of beverages and not spread to other products in stores and restaurants) can then be related to the impact on sales through the price elasticity of demand for these beverages. For our analysis we used a price elasticity of demand of -1.2 based on the figure cited for sugar-sweetened beverages by the Rudd Center. A demand elasticity of -1.2 suggests that for every 10 percent increase in the price of an item, there would be a 12 percent decrease in the quantity of the item sold. Note that this is an own-price elasticity and looks only at the effect on the quantity of the taxed item – it does not consider cross-elasticities where higher prices would lead to increased or decreased quantities of other products (foods and beverages) being consumed. That substitution effect is discussed later in more detail.

Cross Border Impacts

Given that the tax is imposed on containers and would equal 24¢ on a can, the proposed tax is substantially more than other charges and fees that already drive consumers across state lines to shop. Sales tax differentials and beverage container deposits are both cited in the literature as causing cross-border sales changes – and both of those are of much smaller magnitude per item than this proposed tax.

Research on food purchases has found that a one percent increase in sales tax rates in a jurisdiction can lower sales by 1.33 to 5.9 percent based on cross border sales. The proposed tax in this bill would average well over 40 percent on the taxable items, implying that the cross-border impact of the higher tax could be substantial.

With a tax of 24¢ (on a soda can), 32¢ (on a bottle of iced tea) or $1.28 (on a bottle of cranberry juice cocktail), we can see that this tax would be more than sufficient to drive customers away from Vermont retailers and comes on top of higher taxes on these items plus a 5¢ container deposit for carbonated items.

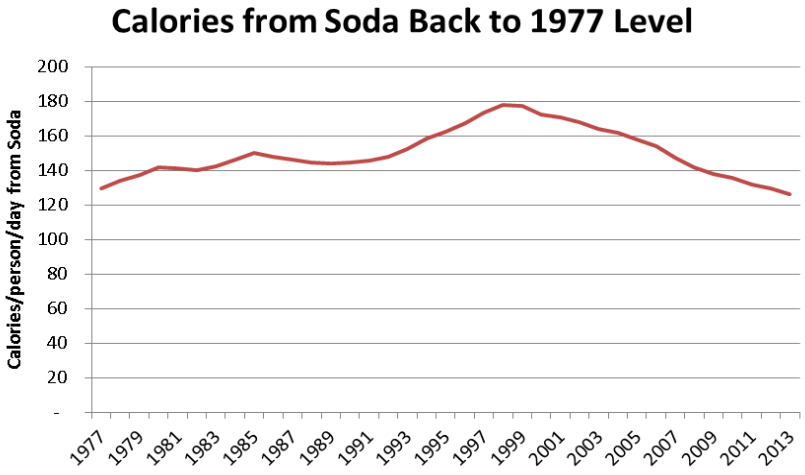
Perspective on Beverage Consumption Data

The proposed tax would affect a wide range of beverages. Proponents often talk about "soda taxes," but taxing beverages with added sugars would affect juice drinks, teas, and sports drinks as well. The tax would increase prices on some products by 100 percent or more, but the average increase would be closer to 40 percent. I encounter a lot of misinformation about beverage consumption and calories, so here are some facts from a national market research firm that I think are helpful. The information comes from one of the firms that specialize in beverage market research; their data are used by the beverage industry and by investment banks and others who follow the business.[4]

Calories from Soda Equal to What They Were When Jimmy Carter Became President

- In 2013 the average American consumed 126 calories per day from drinking soda; that matches the level in 1977.

- Since peaking in 1998, **per capita calories from soda have dropped 29 percent over the last 15 years** and continue to drop. The decline is equal to 52 calories per person per day.



No and Low Calorie Choices and Consumption Are Growing

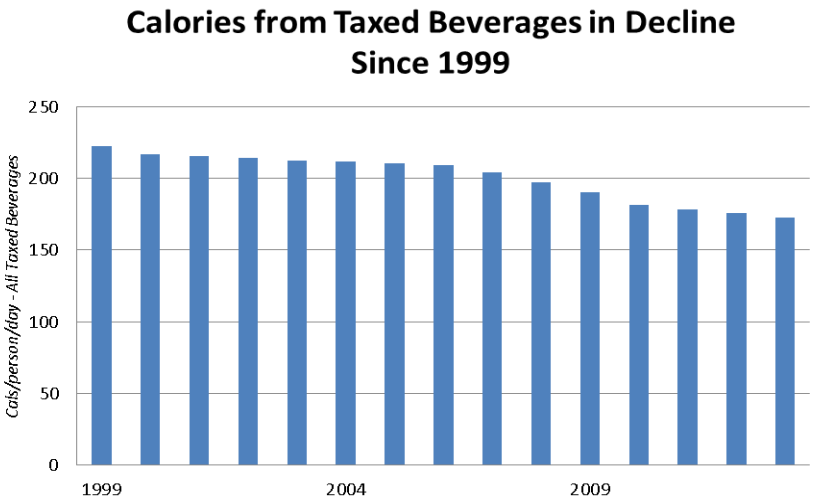
- In 2013, 52 percent of refreshment beverages sold (nondairy, nonalcoholic) were either 100% juices or had zero calories. In fact these beverages have accounted for the majority of refreshment beverages consumed ever since 2006

[4] All consumption data from 1988 onward compiled on an annual basis by Beverage Marketing Corporation for the American Beverage Association. Data prior to 1988 from *Beverage Industry* published by John Maxwell and reported in the National Soft Drink Association's "1986 Statistical Profile" Table 38.

Calories Also Declining from the Broader List of Beverages That Would be Taxed

- Juice drinks, sports drinks, teas, and soda would be subject to the proposed tax but **calories per capita from all products subject to the tax are already down 22 percent since 1999**

- Consumption of 100% juices and zero calorie beverages including bottled water has grown at three times the rate of sugar-sweetened beverages over the last 25 years



Economic Research on the Efficacy of Taxes and Unintended Consequences

In a white paper on beverage taxes, prominent Agricultural and Resource Economist Jeffrey Perloff of the University of California at Berkeley found that these taxes "would have, at best, small effects on caloric consumption and on the fraction of the population that is overweight or obese, but it would raise tax revenue, primarily at the expense of all consumers." Perloff also addressed the unintended consequences of broader sugar taxes, which I will address later.

It is an article of faith for beverage tax advocates that lower consumption of taxed beverages leads to consumption of "better" alternatives. This simplistic assumption is not borne out by evidence. It would be convenient for proponents of the tax to argue that a highly taxed case of soda will motivate a consumer to buy a case of diet soda instead. Unfortunately, neither the economic literature nor marketplace realities bear that out.

First, relying on empirical observation of existing tax differences (across state lines), a review of four studies of existing excise and sales tax differences among states show no significant impact of those taxes on health outcomes or weight loss.[5] So the tax differentials that exist today, albeit by state lines rather than by product categories, do not affect health or weight.

A second approach is to model changes in demand from a tax, but these modeling studies (more than 25) are extremely limited in their analysis of the substitution that would occur in response to a tax – especially a large tax of the magnitude we are discussing today. Without proper adjustment for substitution, these studies will tend to overestimate the projected impact of such a tax.

Of the few studies that explicitly considered substitution, Dharmasena and Capps (2009) reported that increasing regular soft drink prices did increase the demand for both high and low fat milks, suggesting consumers would replace calories from other beverage categories for calories from the taxed items. The Fletcher (2009) study looked at children and adolescents and

[5] Powell (2009), Fletcher (2009), Sturm (2010), and Kim and Kawachi (2006)

found similarly that any reduced soda consumption was offset by higher consumption of other high calorie drinks like whole milk.[6]

It turns out that while the literature suggests individuals may substitute other higher calorie beverages for taxed beverages, the same is true for broader-based taxes such sugar taxes.[7] To conclude, I want to share with the Committee the findings of research that has been done on sugar taxes – where all sugar would be taxed. The more complete studies done were explicitly designed to model substitution to a range of other foods and beverages after the tax.

The findings of the research, particularly the work of LaFrance (2008) suggest that fat consumption increases as the magnitude of a sugar tax increases, resulting in no net reduction in calories consumed and, in fact, higher consumption of other high calorie food like cheese.

Conclusion

This bill would create a new tax that would be expensive for consumers and would be spread across a wide range of food and beverages. The consequence of higher prices is lost beverage sales and a corresponding drop in employment in the beverage, retail, and restaurant trades as well as their suppliers. Sales losses predicted by economic models can be substantiated through empirical observation of consumer responses to higher prices. A tax of this magnitude would be more than sufficient to drive consumers out of state to purchase beverages and they will take other business with them as they do already in response to other, much smaller tax differentials.

The regressive nature of this tax and the lack of evidence that it will provide any health or other benefits lead us to conclude that the primary impact of this tax will be to take money out of consumers' pockets to fund government spending, leaving another burden on business that will cost jobs and disproportionately hurt small businesses.

The economic research literature does not provide any support for the use of these taxes to reduce caloric consumption or improve health outcomes. Differences in existing tax rates do not provide any such benefits and modeling prospective changes to either beverage taxes or broader sugar taxes suggest unintended consequences from substitution effects that result in offsetting increases in calories consumed and shifts to high fat foods.

Thank you very much for the opportunity to present my testimony to the Committee.

[6] Some of the products that are not taxed and whose consumption may increase as a result of substitution effects contain similar or greater amounts of sugar and may also contain fats. Many juices contain as much or more sugar as soda and coffee drinks and flavored milks not include can include more sugar, but also add fat.
[7] The Vermont House also has a sugar tax proposal filed – H.167.