Effects of a Proposed Sugar Sweetened Beverage Excise Tax on Consumer Choice in Vermont

Testimony to the Vermont House Ways and Means Committee

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3/11/2015

Thank you for the opportunity to speak this morning.

I am an applied economist at the University of Vermont, Department of Community Development and Applied Economics and Director of the Center for Rural Studies and Food Systems Research Collaborative. As an applied economist who has worked in Vermont my entire professional career, I have had and do have the opportunity and privilege of working with real people and real data, with the goal of helping to preserve and grow communities that are rich in economic, social, natural, and health capital.

I will speak about a sugary drink tax from that perspective.

I would like to make three major points. These points relate to the economic concepts of PRICES, INCOME, and PREFERENCES related to MARKETING and EDUCATION.

First, PRICES. There seems to be a question about whether taxing sugary drinks will decrease demand. I do not know of any study that concludes otherwise. Increasing the price of a good will decrease the demand for that good.

Some argue the impact of the price increases suggested are not big enough to make a difference. Let me share some facts. Many economists have estimated the price elasticity of sugary drinks to be between -.8 and -2---all decreases in quantity demanded. The variability in estimates are due to differences in available data and differences in analyses. Note, however, that they are all negative. An increase in the price will decrease the quantity of sugary drinks people purchase.

The implementation of a sugary drink tax in Mexico finally gives us some REAL data on what we really want to know---how does an excise tax impact consumer demand.

A 1 peso per liter sugary drink tax was implemented in Mexico in October of 2013. Researchers at the University of North Carolina and Mexico's National Institute of Public Health have been tracking SSB sales since the tax was levied. Mexico's 8 cents per liter tax has resulted in a 10 percent decrease in sugary drink sales. This translates to a price elasticity of about -1.5, in line with U.S. estimates, AND on the higher side.

Mexico's initial results are amazing given they have a population with low incomes and some of the highest obesity rates in the world…..two characteristics that are often used to assert that sugary drink consumption won't decline for "overweight, low income" people. In Mexico, the tax is working for overweight, low income people.

This leads me to my second major point concerning **INCOME**. Sugary drinks are what economists call a "normal" good. Years and years of data analysis show that when income falls people purchase fewer sugary drinks. When you combine this with a price elasticity that is greater than 1, it means that expenditures on sugary drinks WILL fall when the tax is levied, freeing up low income consumer dollars to be spent on non-taxed beverages or other goods.

Some who argue against the tax assert that healthier beverages may be more expensive—they might actually be more or less expensive. The evidence from Mexico shows that purchases of milk, real fruit juice and water have risen since the implementation of the sugary drink excise tax. These drinks contain more "good" nutrition, including vitamins, calcium and protein. And, water contains no calories, but is a necessity for life.

This leads me to my point related to **marketing and preferences**. Using price policies to change behavior works BEST when consumers perceive there are many substitutes in the market for the item that is taxed. We all know that there are plenty of substitute beverages for sugary drinks, some more closely aligned, like diet soda, and fruit flavored seltzers; and others that consumers may not currently perceive as substitutes, such as dairy drinks, water, and 100 percent juice. The sugary drink industry has been so successful in marketing, that they have currently narrowed many consumers' views of substitutes. A price change combined with education about the alternatives to sugary drinks that are tasty and/or nutritious will insure that a sugary drink excise tax will perform even better.

My comments have, so far, been about consumers of sugary drinks. What about producers? Three statewide polls of Vermonters, in 2010, 2012 and 2014 have provided no empirical evidence that Vermonters will cross borders to avoid a sugary drink tax.

I calculated some results based on the 2014 Vermonter Poll that surprised me. Not one consumer who stated they purchased sugary drinks at least once a month, purchased their sugary drinks at gas stations or convenience stores, and who didn't already cross border shop said they would leave the state to purchase their sugary drinks if a tax was levied.

What about people who DO already shop in NH? In 2010, we found that 60% of respondents reported living in a VT/NH border county and doing some sort of shopping in NH. 82% of these respondents who already shop in NH said they would NOT cross the border to avoid paying a sugary drink tax On a 16 ounce sugary drink purchased at a convenience store or gas station.

In 2014, 56 percent of respondents reported consuming at least one sugary drink in the past month, living in a VT/NH border county and doing some sort f shopping in NH. 82% of these respondents who already shop in NH said they would NOT cross the border to avoid paying a sugary drink tax on a 16 ounce sugary drink purchased at a convenience store or gas station.

This evidence shows what we already know. Vermonters are smart. They know that their time is valuable and driving is expensive. Even if the border is 10 minutes away, a consumer earning minimum wage would have already spent $1.50 worth of time, more than the tax on a 16 ounce, 32 ounce, or even two liter container of a sugary drink.

What about small retailers? Small retailers in Vermont, along the CT River and throughout the state are also smart, and they can actually help nudge consumers in the right direction while making a profit. Retailers stock what consumers want. We have already established that there are many substitute beverages for sugary drinks. Retailers can begin to stock more of these non-taxed and either lower calorie, healthier, or both types of options, further helping to meet consumer preferences and shape new consumer preferences while maintaining their profit margins.

Poll results also point to the products that consumers will switch to. In 2010, 52 percent of consumers said their behavior would not change. Twenty-eight percent would switch their purchase to an untaxed beverage, including water, juice, coffee, milk, and diet beverages. Nine percent would switch to a non-beverage item. In 2014, 50 percent of consumers said their behavior would not change. Twenty seven percent would buy a smaller size or switch to a non-taxed beverage, including water, juice, coffee, milk and diet beverages. Two percent would switch to a non-beverage item.

Published research shows that, on average, people would consume 40 percent of the calories they had consumed pre-tax (Chen, et al., 2010; Wang et al., 2012); that is a significant reduction.

What I have shared is based on empirical evidence---evidence that is showing that citizens can be satisfied; businesses can survive and even thrive; and we will foster a healthier population if a sugary drink tax is passed. Thank you for taking the time to consider this data.