A quick update on Philidelphia’s tax on sugary beverages, the “soda tax.” Not the announcement by the American College of Pediatricians that those sugary beverages were bad for children and should be avoided, but the soda tax’s changing political landscape.

Philadelphia, like Berkeley, Mexico City, and other cities, acted upon the “scientific evidence” that drinking sugary beverages was a risk factor for being overweight and being overweight was a risk factor for developing diabetes among other diseases; therefore sugary beverages were a public health hazard and should be restricted – by taxation. Arguing about the scientific merit of the evidence will distract us, so let’s assume, for the sake of this report, that the risk factors are as strong as causes and that the “soda tax” will improve the population health of Philadelphia.

The Philadelphia experiment differed from other taxes in that it taxed not only sugary beverages but their dietetic brethren, the only beverages left untaxed were water and fruit juice. Almond-milk, the “healthy” dairy alternative is taxed as our nutrient-rich liquid foods, like Ensure, that help seniors supplement and improve their nutrition.

**The impact on consumption**

There are several studies to consider. An early report on adult’s self-reported consumption [1] found
“Within the first two months of tax implementation, relative to the comparison cities, in Philadelphia, the odds of daily consumption of regular soda was 40% lower; energy drink was 64% lower; bottled water was 58% higher, and the 30-day regular soda consumption frequency was 38% lower.”

But three studies, performed about 16 months later and based on sales painted a more complex, nuanced picture – no surprise. There was an increase in available untaxed beverages, especially water and a decline in available sodas. But the tax increase, amounting to a dollar in a 2-liter bottle of soda, was not always wholly passed on to consumers, creating disparities making it a regressive, rather than a progressive tax. Who faced greater taxes?

“Pass-through is greater among stores in higher-poverty neighborhoods, stores located farther from untaxed stores outside Philadelphia, stores that are independent as opposed to part of national chains, and for individual servings than for larger sizes” – locally owned, neighborhood stores in impoverished areas [2]

The second [3] of the longer term studies found that, the higher cost did alter consumer’s behavior, although again not always as anticipated.

- For children in the broadest definition, there was no change in their consumption of sweetened beverages. But among children that consume the most of these beverages, and African American children are disproportionally represented in that group, their consumption decreased by about 22% or anywhere from 32 to 64 calories a day.
- For adults, there was a similar pattern with all adults reducing their intake by about two 20 ounce bottles a week, while African American adults reduced their intake by 3 of those 20-ounce bottles weekly.
- The other significant shift was in the site of purchase, with more shoppers purchasing their soda, at a lower price, outside of Philadelphia. While 17% of respondents initially bought their soda outside of the tax area, over time that increased to 33% of consumers. This substitution of sites of purchase is called cross-shopping, and we see it whenever a sin tax is employed, e.g., cigarette purchases on Indian reservations exempt from federal tobacco taxes.

Finally, in a third study [4] they found,

“… our results suggest that consumers have strong preferences for taxed beverages relative to healthier alternatives, and these preferences are not easily altered. … Second, our analysis shows that in order to be effective, taxes must be imposed in a way that makes them hard to evade. Highly localized taxes make it relatively easy for consumers to seek alternatives…. Finally, while we would expect low income households to generally be more price sensitive, our results also show that low income consumers are less likely to avoid the tax through cross-shopping.”

The result was a tax that might, or might not, influenced consumption but that did fall more heavily on the impoverished – a regressive tax on the people it was meant to help.

**The Politics of Policy**

The initial tax proposed in Philidelphia was framed to improve population health and failed
passage three times. The current mayor reframed the tax as revenue enhancement, after all, everyone wanted pre-K education for the children, and it passed. And that brings us to the politics of why the soda tax may be once again “up for discussion.”

- The tax revenue fell 14% short of projections in 2017
- Of the $149 million in taxes collected, only 25% went to pre-K, the rest has been placed in the city’s general funds – perhaps we need to bring back the “lock-box.”
- There has been a growing recognition that the tax disproportionately impacts impoverish African Americans and they vote. [5] They believe that revenue needs a broader base. And they did point out that to tie pre-K education to a sin tax leaves a dilemma, sin and fund the public good or remove the sin of sugary beverages from your life along with the funding of your children’s early education.

Local reporting from Philadelphia suggests a deeper political, pay to play connection. When the current mayor proposed the soda tax he reached out for help to John Dougherty, the now indicted labor leader for the International Brotherhood of Electrical Workers, who help get the necessary council votes. That was aligned with a vendetta Dougherty had with the local Teamsters, who had been critical of his leadership. The soda tax resulted in less soda coming into the city and that cost Teamsters jobs.

It’s an election year in Philadelphia, the mayor’s opponents are pointing to Dougherty, vulnerable Council members want to rethink or revise a tax that is regressive and falls more heavily on African American voters. You don’t hear a word about the tax’s health benefits. Policy makers are politicians and respond to political forces far more than scientific evidence. The science in setting policy is more often political rather than biologic science. The golden rule still applies, “He who has the gold, rules,” and gold comes as votes, power, and money.

Sources: The editorial [2] in the Wall Street Journal was the initial impetus and led to the following:


