Yes, Soda Taxes Seem to Cut Soda Drinking
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For about a decade now, policy makers and the soda industry have been fighting about the idea of a big soda tax. Proponents say it would fight obesity by reducing consumption of sugary drinks. A leading objection by the industry is that the tax simply would not work.

Those discussions were largely theoretical, because no big city, state or country had passed the kind of tax that advocates wanted.

That recently changed. In 2013, Mexico passed a tax right out of the public health literature. And now the theoretical debate is becoming more real. Preliminary data from the Mexican government and public health researchers in the United States finds that the tax prompted a substantial increase in prices and a resulting drop in the sales of drinks sweetened with sugar, particularly among the country’s poorest consumers. The long-term effects of the policy remain uncertain, but the tax is being heralded by advocates, who say it could translate to the United States.

“It’s exactly what we thought the tax would do,” said Barry Popkin, a professor of nutrition at the University of North Carolina, whose team conducted the research.

The idea for the soda tax is in some ways modeled on the tobacco taxes passed by states and the federal government over the last few decades. The idea of those taxes was not only to raise revenue — though that was a nice side effect — but also to
discourage people from buying cigarettes. A robust literature now exists showing that the resulting higher prices really did push down cigarette sales, particularly among young people.

Similarly, the idea for the soda taxes is that they should be applied to bottlers or retailers, so that the prices show up on price tags, not at the cash register. As with the most effective cigarette taxes, proponents want them to be large enough that customers notice the difference.

The tax in Mexico followed those recommendations. It cost bottlers a peso for every liter of sugar-sweetened drinks, which amounts to about a 10 percent price increase, a substantial jump. Because it was applied to distributors, any resulting increase would show up on list prices.

There are essentially three steps to figuring out whether the tax will have an impact on public health.

■ Does the tax raise the price of soda? In theory, the tax could be absorbed by the bottlers or sellers, so that consumers never feel it. Researchers thought the tax would be fully passed through in the form of higher prices, and in Mexico it was.

■ Do increases in the price of soda actually reduce purchases? The research by the University of North Carolina, conducted with the Mexican public health authorities, found that they did. Over the course of last year, there was an average 6 percent decrease in soda sales, and the effect appeared to intensify as the year wore on. By December 2014, the last year of the study, sales were down 12 percent compared with December 2013. The declines were the biggest for lowest-income Mexicans — as large as 17 percent in December — suggesting that it was the prices, and not publicity around the tax, that was making the difference.

■ Did rates of obesity or diabetes fall? This crucial question remains unanswered. It’s possible, for example, that people who stopped buying soda bought apple juice with a similar number of calories from natural sugar. Or maybe they switched to water but ate a lot more ice cream. There’s some science that shows that liquid calories don’t make people full the same way solid ones do — suggesting that the lost calories won’t be fully replaced. But there’s little research on what happens...
when you change people’s beverage habits over the long term, so it will take years before we know whether a drop in soda drinking translates into actual health gains for Mexicans.

The taxes appear likely to hurt soda makers’ sales. The American Beverage Association, a trade group for the soda makers, has fought strongly against the taxes. The group argues that the taxes would unfairly single out one industry for the obesity crisis, and says that customers will simply find their calories elsewhere.

The beverage group points to earlier studies of soft drink taxes, in the United States and in Europe. In those studies, soda consumption didn’t decline much, and obesity didn’t budge, because people switched to other caloric drinks.

“They just found that folks would just find other ways to get the products or nutrients they wanted,” said William Dermody, a spokesman for the association. “Taxes and bans and restrictions don’t change the behaviors that lead to obesity.”

But the taxes in those studies tended to be smaller than the one in Mexico, and in the United States they came in the form of sales taxes, which may have gone unnoticed by consumers.

Only one city in the United States has passed a tax like Mexico’s. Berkeley, Calif., passed a penny-per-ounce excise tax on sugary drinks last year, in effect since March. Two research teams looked at the first three months of the Berkeley tax and found that prices of soda rose, but more modestly than they did in Mexico. We don’t know if people actually bought less.

The researchers looking at Berkeley want time to gather more data on both questions. But they also think that Berkeley may be a poor test market. It’s a small city where soda is not very popular, and most people already drive several miles to buy their groceries, so stores may have been particularly wary about nearby price competition. If the Berkeley soda tax fails to change behavior, it might just be that a soda tax doesn’t work very well at the level of a small community.

David Frisvold, an assistant professor of economics at the University Iowa, who worked on one of the Berkeley studies with John Cawley, a professor of economics at
Cornell, said a better policy experiment would allow researchers “to compare across states,” adding, “I think that at a broader level, it would be likely to have a different response from at the small local level.”

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