

# A Review of the Labor Market Impacts of Local Sugar-Sweetened Beverage Taxes in the United States

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## Key Findings

- **Evaluations of U.S. SSB taxes find no evidence of net job losses or job losses in industries that produce or sell SSBs.**
- **Evaluation studies find no impacts of SSB taxes on either unemployment claims or numbers of people employed.**

Sugar-sweetened beverage (SSB) taxes are increasingly proposed and implemented as a policy tool to both raise revenue and address the rising prevalence of obesity and other diet-related chronic diseases, which are linked to SSB consumption.<sup>1-3</sup> Studies have shown that the economic costs of these diseases are substantial and include direct costs due to increased health care spending and indirect costs from productivity loss (i.e., presenteeism and absenteeism), disability, and premature death.<sup>4</sup> For example, it was estimated that, in 2013, medical costs of obesity-related illnesses for adults totaled \$342 billion in the United States (U.S.), representing 28% of total health care spending for non-institutionalized adults.<sup>5</sup>

Since 2015, eight local jurisdictions have implemented SSB taxes in the U.S. (hereafter referring to taxes on SSBs alone as well as those that also apply to artificially sweetened beverages (ASBs), as have taxes in two jurisdictions). Numerous evaluation studies of these taxes have found that they are effective at increasing prices and reducing demand for SSBs. Meta-analyses of U.S. SSB tax evaluations have found, on average, that 70% of these taxes (which range from 1 to 2 cents per ounce) are passed onto consumers in the form of higher prices of taxed beverages<sup>6</sup> and that demand for taxed beverages is reduced by 20%.<sup>7</sup>

One common argument made against SSB taxes is that they will lead to considerable job losses, particularly in industries that produce, distribute, and sell the taxed beverages.<sup>8</sup> The soft drink industry has funded simulation studies, which were not peer-reviewed, that back these claims.<sup>9</sup> However, these studies have failed to fully account for (1) substitution to untaxed beverage products, such as diet soda and water, which are often produced by the same companies, (2) reallocation of consumer spending to

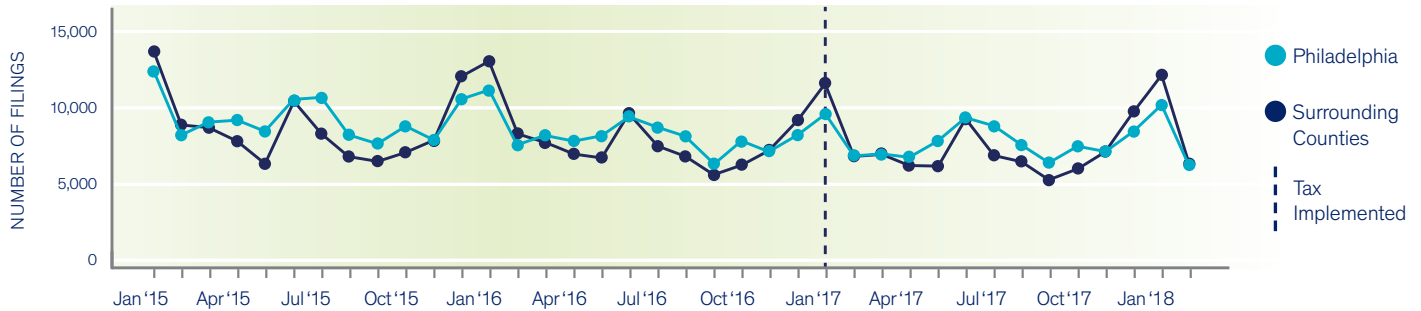
other goods and services, and (3) economic activity generated by government spending of additional tax revenue.<sup>10</sup> A non-industry funded peer-reviewed simulation study that incorporated these factors found no net reduction in employment; and, while the study predicted a reduction in beverage industry employment, these job losses were offset by new jobs in the private and government sectors.<sup>10</sup> A limitation of all SSB employment simulation studies is that they do not incorporate historical declines in soft drink industry employment, which are likely due to automation. Between 1992 and 2007, the number of people employed in the U.S. soft drink industry decreased by 30% while revenue increased by 64%.<sup>9,11</sup>

To date, three peer-reviewed SSB tax evaluation studies have estimated labor market impacts in two U.S. taxing jurisdictions: Philadelphia, PA, which implemented a 1.5 cent per ounce tax on both SSBs and ASBs in January 2017, and San Francisco, CA, which implemented a 1 cent per ounce tax on SSBs in January 2018.<sup>12-14</sup> These empirical studies consistently found no net negative impacts on employment and unemployment outcomes. The first study of Philadelphia found no statistically significant pre-post changes in new monthly unemployment claim filings for all industries (see Figure 1) as well as for supermarkets, soft drink manufacturers, and other potentially affected industries in Philadelphia relative to adjacent counties in the year following the tax.<sup>12</sup> The second study of Philadelphia found no negative impacts on the number of people employed in the overall economy (see Figure 2), the private sector, and select industries that sell sweetened beverages, including fast-food restaurants and convenience stores, up to 2.5 years post-tax.<sup>13</sup> Lastly, the third study conducted an analysis of employment in San Francisco; the results revealed no negative impacts on employment in the overall economy (see Figure 3), the private sector, and select industries that produce and sell SSBs, including beverage manufacturing, supermarkets and other grocery stores, convenience stores, and fast-food restaurants, up to 2 years post-tax.<sup>14</sup>

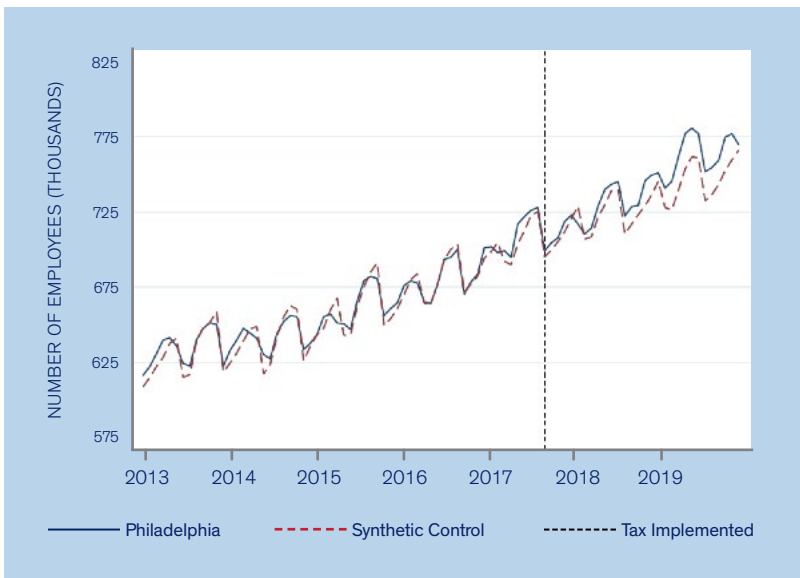
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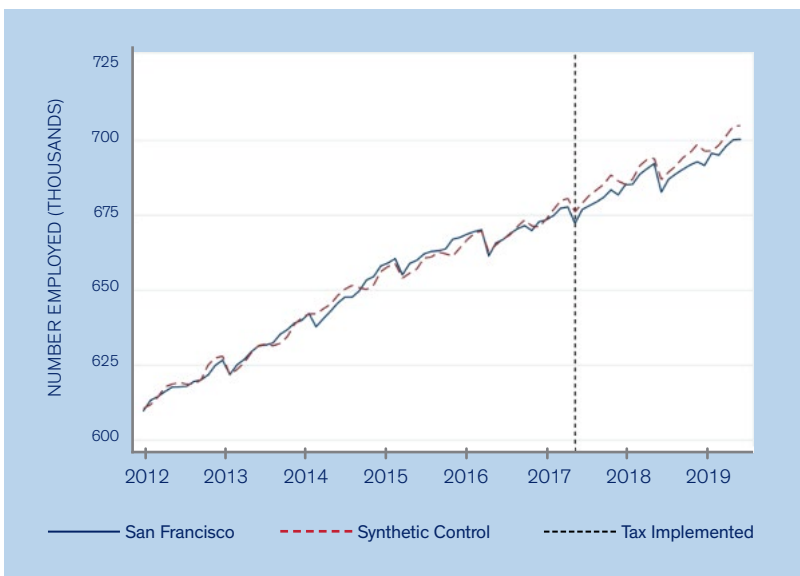
**FIGURE 1** Unadjusted new monthly unemployment benefit claim filings in Philadelphia, PA, and surrounding counties for all industries, January 2015 through February 2018.<sup>12</sup>



**FIGURE 2** Total number of persons employed in Philadelphia, PA, and its synthetic control, monthly, January 2012 through June 2019.<sup>13</sup>



**FIGURE 3** Total number of persons employed in San Francisco, CA, and its synthetic control, monthly, January 2013 through December 2019.<sup>14</sup>



## Conclusions

Emerging evidence based on evaluations of local U.S. SSB taxes suggests that SSB taxes are not associated with net job losses or job losses in industries that produce and sell SSBs. These real-world findings likely differ from predictions made by industry-funded simulation studies because those studies did not fully account for substitution effects, reallocation of consumer spending, and increased government spending of new tax revenue. Additionally, the results of the U.S. SSB tax evaluations are consistent with an evaluation of the 2014 Mexico taxes on SSBs and nonessential energy-dense foods which found no evidence that the taxes were associated with reductions in employment in the manufacturing industry and commercial sector or increases in the national unemployment rate.<sup>15</sup> The evidence of no job loss is important when also considering the potential economic benefits of SSB taxes; tax-related reductions in SSB consumption may lead to health care savings<sup>16,17</sup> and increased worker productivity<sup>18</sup> by reducing the prevalence of obesity and other preventable diet-related diseases.

## SUGGESTED CITATION

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