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GLOBAL IMPLEMENTATION OF SODA TAXES: IS THERE A BETTER SOLUTION FOR COMBATTING OBESITY?

INTRODUCTION

Sugar-sweetened beverages (SSBs), namely soft drinks, have been around since the eighteenth century.¹ The Center for Disease Control and Prevention (CDC) defines SSBs as “any liquids that are sweetened with various forms of added sugars like brown sugar, corn sweetener, corn syrup, dextrose, fructose, glucose, high-fructose corn syrup, honey, lactose, malt syrup, maltose, molasses, raw sugar, and sucrose.”² The CDC further explains that SSBs encompass “soda (not sugar-free), fruit drinks, sports drinks, energy drinks, sweetened waters, and coffee and tea beverages with added sugars.”³

The invention of soda traces back to 1851 in Ireland with the production of one of the first soft drinks, ginger ale.⁴ Later, in 1876, root beer was one of the first sodas sold to the public in the United States (US) city of Philadelphia.⁵ Dr. Pepper was created in 1885, becoming one of “the oldest major soft drink[s]

1. *The Origins of Soda*, MEDICAL BAG (Jan. 22, 2014), https://www.medicalbag.com/grey-matter/the-origins-of-soda/article/472378/Soft_Drink, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/soft%20drink> (last visited Sept. 19, 2019). The Merriam-Webster dictionary defines “soft drinks” as “a usually carbonated nonalcoholic beverage.” The term soft drink refers most commonly to “soda pop,” but can also be defined to include any “cold drink that is usually sweet, does not contain alcohol, and is often sold in bottles or cans.” *Id.* This Note will use “soft drinks” and “soda” interchangeably.

2. CENT. FOR DISEASE CONTROL AND PREVENTION, GET THE FACTS: SUGAR-SWEETENED BEVERAGES AND CONSUMPTION (2018), <https://www.cdc.gov/nutrition/data-statistics/sugar-sweetened-beverages-intake.html> [hereinafter CDC, *Get the Facts*].

3. *Id.*

4. *History and Timeline of Soft Drinks*, HISTORY OF SOFT DRINKS, <http://www.historyofsoftdrinks.com/soft-drink-history/timeline-of-soft-drinks/> (last visited Sept. 19, 2019).

5. Mary Bellis, *The History of Root Beer*, THOUGHTCO (Aug. 9, 2019), <https://www.thoughtco.com/history-of-root-beer-1992386>.

in America.”⁶ Shortly thereafter, in 1886, Coca-Cola was invented,⁷ followed by the creation of Pepsi-Cola in 1893.⁸

Since the invention and subsequent introduction of soda to the consumer market in the 1800s, consumption has increased around the globe.⁹ The growing popularity of soda over the past century is largely attributable to marketing campaigns employed by soft drink manufacturers.¹⁰ These marketing campaigns are employed in hopes of reaching every individual and compelling them to try their company’s soft drinks.¹¹ Soft drink companies target varying demographics around the world and often use marketing campaigns aimed at more vulnerable populations, such as children and adolescents, as well as low- and middle-income communities and developing countries.¹² These

6. *History of Dr. Pepper*, DR. PEPPER MUSEUM, <https://drpeppermuseum.com/history/> (last visited Sept. 19, 2019); *The Origins of Soda*, *supra* note 1.

7. The Coca-Cola Company, *The Chronicle of Coca-Cola: Birth of a Refreshing Idea*, COCA-COLA COMPANY (Jan. 12, 2012), <https://www.coca-colacompany.com/stories/the-chronicle-of-coca-cola-birth-of-a-refreshing-idea>; *Who We Are*, COCA-COLA COMPANY, <https://www.coca-colacompany.com/careers/who-we-are-infographic> (last visited Sept. 19, 2019).

8. *History of the Birthplace*, THE PEPSI STORE, <https://www.pepsistore.com/history.asp> (last visited Sept. 19, 2019).

9. See Brian Palmer, *When Did Soda Get So Big?*, SLATE (Sept. 14, 2012), http://www.slate.com/articles/news_and_politics/explainer/2012/09/new_york_city_soda_ban_when_did_soft_drinks_get_so_big_in_the_first_place_.html.

10. Allyn M. Taylor & Michael F. Jacobson, *Carbonating the World: The Marketing and Health Impact of Sugar Drinks in Low- and Middle-Income Countries*, CENTER FOR SCI. IN THE PUBLIC INT. 1 (2016), <https://cspinet.org/sites/default/files/attachment/carbonatingreport.pdf>.

11. *See Id.*

12. *Id.*

With soda executives drooling over the almost limitless opportunities for sales growth in Latin America, Asia, Africa, and the Middle East, their marketing onslaught involves everything from building bottling plants to buying a fleet of trucks to sponsoring celebrity-studded advertising campaigns. Thanks to that industry effort, rates of obesity . . . and other health problems related to sugar drinks have begun to soar in some countries and will undoubtedly soar in others, imposing enormous health-care costs on countries already struggling to provide health care to their growing populations.

marketing techniques have proven successful for soft drink companies.¹³

Furthermore, soft drink companies use tactics that make their products identifiable to the consumer, such as particular packaging for products and unique advertising slogans and music.¹⁴ Soft drink companies frequently showcase happy, healthy actors, and often use celebrities in commercials and other advertisements to make soda consumption appear more attractive.¹⁵ These advertising techniques produce a psychological effect on consumers that makes them want to purchase and consume soda.¹⁶

While these marketing techniques have clearly succeeded in increasing soft drink companies' global sales, they have often failed to shed light on health concerns related to soft drink consumption.¹⁷ Behind these strategic marketing ploys, the many adverse health effects caused by soft drink consumption are

Id. at 1. See CDC, *Get the Facts*, *supra* note 2; *Guide: Marketing Soft Drinks*, MARKET-SCHOOLS.ORG, <http://www.marketing-schools.org/consumerpsychology/marketing-soft-drinks.html> (last visited Sept. 19, 2019).

13. *Guide: Marketing Soft Drinks*, *supra* note 12. Marketing techniques allow soft drink companies to reach consumers around the world, facilitating greater engagement with a wider audience. See Taylor & Jacobson, *supra* note 10, at 11, 26–36. In turn, the ability to reach more consumers presents greater opportunities for soft drinks companies to lure individuals into continued consumption of their products. *Id.*

14. *Id.*

15. *Id.*

16. *Id.* Soft drink companies enlist professionals to aid in producing a psychological effect on consumers that urges them to consume their products. *Id.* For example, packaging specialists take particular care in the design of soda cans, the cases these cans may be packaged in, and any other packaging that might be associated with the sale of the beverage. *Id.* Notably, “[t]he way a product looks is important because it communicates subtle psychological messages to the consumer about what the brand stands for.” *Id.* Further, social media specialists for soft drink companies “rel[y] on psychological insights about the customer to create ads and interactive experiences that will engage users.” *Id.*

17. Anne Kavanaugh, *Sugar's Sick Secret's: How Industry Forces Have Manipulated Science to Downplay the Harm*, U. CAL. NEWS (Jan. 10, 2019), <https://www.universityofcalifornia.edu/news/sugar-s-sick-secrets-how-industry-forces-have-manipulated-science-downplay-harm> (discussing the soda industry's tendency to hide the harmful effects their products can have on an individual's health); Alice G. Walton, *Who's to Blame for Our Soda Problem—You, or Beverage Companies?*, ATLANTIC (July 2, 2012), <https://www.theatlantic.com/health/archive/2012/07/whos-to-blame-for-our-soda-problem-you-or-beverage-companies/259288/>.

worrisome.¹⁸ In recent years, numerous health issues have been linked to consumption of soft drinks.¹⁹ From obesity to diabetes, consumption of soft drinks is a growing public health concern around the world.²⁰

Obesity is on the rise across the globe, tripling since 1975.²¹ In 2016, the World Health Organization (WHO) published a fact sheet on obesity and overweight statistics,²² reporting that more than half of the world's adult population is obese or overweight.²³ Additionally, the WHO reported that more deaths were attributable to being obese or overweight than to being underweight²⁴ as a result of issues like undernutrition.²⁵ The

18. TAXES ON SUGARY DRINKS: WHY DO IT?, WORLD HEALTH ORGANIZATION [WHO] (2017), <https://apps.who.int/iris/bitstream/handle/10665/260253/WHONMHPND16.5Rev.1eng.pdf?sequence=1&isAllowed=y> [hereinafter WHO, TAXES ON SUGARY DRINKS].

19. *Id.*

20. Sanjay Basu et al., *Relationship of Soft Drink Consumption to Global Overweight, Obesity, and Diabetes: A Cross-National Analysis of 75 Countries*, 103 AM. J. OF PUB. HEALTH 2071, 2071 (2013).

21. *Obesity and Overweight*, WORLD HEALTH ORG. (Feb. 16, 2018), <http://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>. The World Health Organization was formed on April 7, 1948, when its constitution went into effect. *About*, WORLD HEALTH ORG., <https://www.who.int/about> (last visited Sept. 19, 2019). Within the United Nations system, the WHO is primarily responsible for directing and coordinating international health initiatives. *Id.* The WHO works with countries in an effort to promote health objectives. *Id.*

22. *See Defining Adult Obesity and Overweight*, CENT. FOR DISEASE CONTROL AND PREVENTION (Apr. 11, 2017), <https://www.cdc.gov/obesity/adult/defining.html>. A determination of whether an individual is obese or overweight is assessed based on that person's body mass index (BMI). *Id.* A BMI calculation accounts for the individual's weight and height. *Id.* A high BMI indicates that a person is overweight or obese, whereas a lower BMI indicates that a person is either of normal weight or potentially underweight. *Id.*

23. *Obesity and Overweight*, *supra* note 21.

24. *Id.*

25. *Malnutrition*, WORLD HEALTH ORG. (Feb. 16, 2018), <http://www.who.int/news-room/fact-sheets/detail/malnutrition>. The WHO notes that undernutrition is characterized by "wasting (low weight-for-height), stunting (low height-for-age), and underweight (low weight-for-age)." *Id.* Wasting "indicates recent and severe weight loss" due to a person lacking sufficient food. *Id.* Stunting is often indicative of "poor socioeconomic conditions" where a child is not receiving appropriate feeding or care. *Id.* Consequently, when a child is underweight, they may be stunted and wasted, which can leave the child "much more vulnerable to disease and death." *Id.*

high obesity rates and the elevated risk of death attributable to obesity are especially concerning, particularly considering that obesity is a preventable health issue.²⁶

In response to the staggering number of individuals who are overweight and obese globally, countries have been looking for ways to combat the adverse effects of weight-related problems facing their respective populations, including the increasing prevalence of noncommunicable diseases (NCDs).²⁷ NCDs, which include “heart disease, stroke, cancer, chronic respiratory diseases and diabetes,” are often attributable to an individual being obese or overweight.²⁸ Consequently, the WHO, prompted by the astonishing number of deaths attributable to NCDs, published a guideline on sugar intake in 2015.²⁹ This guideline made recommendations about sugar intake for both adults and children in an effort to combat and control weight gain.³⁰ While these recommendations have served as a starting point to raise awareness concerning global obesity issues, guidelines alone have not been sufficient to decrease sugar intake from soda to effectively reduce weight-related problems.³¹

One of the most significant sources of sugar intake around the world comes from added sugars in the products people consume on a daily basis.³² Thus, in an attempt to combat the current obesity epidemic, countries have begun targeting soft drinks and other SSBs, both major sources of daily sugar,³³ by

26. *Obesity and Overweight*, *supra* note 21.

27. Sarah A. Roache & Lawrence O. Gostin, *The Untapped Power of Soda Taxes: Incentivizing Consumers, Generating Revenue, and Altering Corporate Behavior*, 6 INT'L J. HEALTH POL'Y & MGMT. 489, 489 (2017).

28. *Noncommunicable Diseases (NCD)*, WORLD HEALTH ORG. (2019), <http://www.who.int/gho/ncd/en/>. NCDs are often brought about by common risk factors which “include . . . unhealthy diet, insufficient physical activity, overweight/obesity. . . .” *Id.* The growing risk that NCDs pose can be stopped if appropriate health measures are taken. *Id.*

29. GUIDELINE: SUGAR INTAKE FOR ADULTS AND CHILDREN, WHO 7 (2015), https://apps.who.int/iris/bitstream/handle/10665/149782/9789241549028_eng.pdf?sequence=1. NCDs are the leading cause of death in the world. *Id.*

30. *Id.* at 6.

31. WHO, TAXES ON SUGARY DRINKS, *supra* note 18.

32. ACTION FOR HEALTHY FOOD, A ROADMAP FOR SUCCESSFUL SUGARY DRINK TAX CAMPAIGNS 4 (2015), http://www.kickthecan.info/sites/default/files/documents/AHF%20Roadmap_Oct%202015_0.pdf.

33. *Id.*; The Nutrition Source, *Sugary Drinks*, HARV. T.H. CHAN SCH. OF PUB. HEALTH, <https://www.hsph.harvard.edu/nutritionsource/healthy-drinks/sugary-drinks/> (last visited Sept. 19, 2019).

implementing soda taxes.³⁴ Taxing sugary products dates back to as early as 1922 when Norway began taxing foods and beverages containing added sugar.³⁵ Later, in 1940, Finland placed a tax on soft drinks, which encompassed a variety of sugary drinks, including soda.³⁶ Since then, as global concern over the impact of SSBs on the obesity epidemic has continued to grow, a multitude of other countries have enacted similar taxes on soda and other sugar-filled products.³⁷ As of January 2018, many countries have introduced or enacted soda taxes,³⁸ while others, like Australia,³⁹ have contemplated the idea of passing taxes of their own.⁴⁰ Mexico and France, for example, have taxed the purchase of soft drinks.⁴¹ Other countries, like Hungary, have simply tried to place limits on the amount of sugar permitted for use in certain food and drink products.⁴²

Increasing concerns regarding international population health have led to the rising movement toward taxing soda and other sugary drinks in an attempt to reduce and prevent obesi-

34. Bruce Y. Lee, *Thinking About Implementing a Soda Tax? Here is a How To' Guide*, FORBES (July 2, 2018), <https://www.forbes.com/sites/brucelee/2018/07/02/thinking-aboutimplementing-a-soda-tax-here-is-a-how-to-guide/#5dd6d72c54ad>.

35. Briony Harris, *Will a Sugar Tax Help Reduce Obesity?*, WORLD ECON. FORUM (Mar. 14, 2018), <https://www.weforum.org/agenda/2018/03/will-a-sugar-tax-help-reduce-obesity/>.

36. Francie Diep, *A World Tour of Sugary Taxes*, PAC. STANDARD (Oct. 13, 2016), <https://psmag.com/news/a-world-tour-of-sugary-taxes>.

37. Lester Wan et al., *Soda Taxes: The Global Picture in 2017*, BEVERAGE DAILY (Dec. 20, 2017), <https://www.beveragedaily.com/Article/2017/12/20/Sugar-taxes-The-global-picture-in-2017>. The United Kingdom, Ireland, South Africa, Mexico, and France are a few countries around the globe that have enacted SSB taxes. *Id.*

38. Esther Han, *Dozens of Countries Now Tax Sugary Drinks but Sweet-Toothed Australia isn't Interested*, SYDNEY MORNING HERALD (Jan. 8, 2018), <https://www.smh.com.au/healthcare/dozens-of-countries-now-tax-sugary-drinks-but-sweettoothed-australia-isnt-interested-20180103-h0cv21.html>. As of January 2018, it was estimated that more than two dozen countries had enacted soda taxes. *Id.*

39. *Id.*

40. *Id.*

41. PUTTING TAXES INTO THE DIET EQUATION, WHO 239–40 (Apr. 2016), <https://www.who.int/bulletin/volumes/94/4/16-020416.pdf>.

42. Julia Belluz, *Mexico and Hungary Tried Junk Food Taxes – And They Seem to be Working*, VOX (Apr. 6, 2018), <https://www.vox.com/2018/1/17/16870014/junk-food-tax>; Diep, *supra* note 36.

ty and health issues linked to soda consumption.⁴³ In order to effectively address the obesity epidemic, however, countries around the world need to further develop health laws to accompany the implementation of soda taxes globally. This Note will argue that, while taxing SSBs is a critical first step toward effectively lowering the prevalence of obese and overweight populations, countries must take a more holistic approach to reducing sugar intake. An effective holistic approach should include enacting effective SSB taxes or revising current SSB taxes to be more effective; making healthier alternatives more affordable for all communities; limiting the avenues through which sugary products, like SSBs, are available to children; and limiting advertisements of these products similarly to the restrictions placed on tobacco and alcohol advertisements.

Part I of this Note will examine the rationale behind soda taxes. In doing so, it will assess whether or not these taxes are actually a successful means of addressing obesity concerns, or whether they are just one part of a bigger equation necessary for solving the global obesity epidemic. Part II will examine Mexico's soda tax and how it has effectively decreased the sale of soda in the country.⁴⁴ It will also consider the possibility that decreased soda consumption in Mexico has not actually led to a decline in obesity. Part III will discuss the European countries of France, Belgium, and the United Kingdom (UK) through a similar lens, examining how those countries have enacted their soda taxes, as well as whether those taxes have caused a decline in sugar consumption and obesity rates. Part IV will examine the myriad ways different US states have approached soda taxes, as the US has yet to take a uniform, federal approach to soda taxation. Part IV will also examine why soda taxes are not always a legally sufficient means of tackling the obesity problems in the US. Further, this Part will discuss whether the cities and states that have successfully enacted such taxes have actually seen reduced consumption and obesity rates. Part V will propose that soda taxes are not the only solution to controlling the obesity epidemic, but rather countries must implement additional health policies through legislation

43. WHO, TAXES ON SUGARY DRINKS, *supra* note 18.

44. *Sugar-Sweetened Beverage Purchases Declined in Two Years After Mexican 'Soda Tax' Passed*, GILLINGS SCHOOL NEWS (Feb. 21, 2017), <https://sph.unc.edu/sph-news/sugar-sweetened-beverage-purchases-declined-in-two-years-after-mexican-soda-tax-passed/>.

that deters consumers from choosing unhealthy products and makes healthier foods and beverages more accessible to all economic classes.

I. THE RATIONALE FOR SODA TAXES: ARE SODA TAXES ACTUALLY A SUCCESSFUL MEANS OF COMBATTING INTERNATIONAL OBESITY?

Since 2011, there has been a strong international push to tax SSBs, particularly in light of the negative health impacts often associated with their consumption, including rising rates of obesity and overweight populations.⁴⁵ As more countries begin to enact taxes to control the intake of soft drinks, it is essential to assess whether these taxes are working. Specifically, there is concern that these taxes may not be an adequate solution to fighting obesity.⁴⁶

Advocates for soda taxes commonly cite to various studies supporting the rationale that consumption of soft drinks is directly linked to obesity, and, therefore, a tax is necessary to improve public health.⁴⁷ Those who support such a tax posit that it will not only diminish obesity rates, but also have the incidental benefit of raising tax revenue.⁴⁸ Thus, while benefiting public health and welfare, these taxes provide revenue to make other improvements to society.⁴⁹ Proponents of soda taxes also point to the taxation and restrictions placed on tobacco as a successful example of using a tax to decrease consumption of a particular product.⁵⁰

45. Diep, *supra* note 36.

46. Sarantis Michalopoulos, *Soft Drink Makers Back Product Reformulation as "Healthier" than Taxation*, EURACTIV (June 23, 2017), <https://www.euractiv.com/section/agriculture-food/news/soft-drinks-industry-says-reformulation-is-healthier-than-taxation/>.

47. See Lyndon B. Carew Jr., *Opinion: Soda Tax Misguided*, BURLINGTON FREE PRESS (Apr. 1, 2015), <https://www.burlingtonfreepress.com/story/opinion/comment-debate/2015/04/01/opinion-soda-taxmisguided/70733320/>.

48. *Sweet Benefits of the Soda Tax: Examining Impacts and Implications for Revenue*, U. PA. WHARTON PUB. POL'Y INITIATIVE (Dec. 5, 2017), <https://publicpolicy.wharton.upenn.edu/live/news/2239-sweet-benefits-of-the-soda-tax-examining-impacts-for-students/blog/news.php> [hereinafter *Sweet Benefits of the Soda Tax*].

49. *Id.*

50. Carolyn L. Engelhard et al., *Reducing Obesity: Policy Strategies from the Tobacco Wars*, URBAN INST. v, v (July 2009), <https://www.urban.org/sites/default/files/publication/30511/411926-Reducing-Obesity-Policy-Strategies-from-the-Tobacco-Wars.PDF>.

While these are all important benefits, many have questioned the validity of studies that show a correlation between soda consumption and obesity.⁵¹ Those on this side of the soda tax controversy often claim that these taxes do not adequately reduce obesity rates, and even if they do, the decrease is insignificant.⁵² These opponents find that, even if a soda tax leads to fewer soda purchases, consumers may turn to other foods and beverages, and, consequently, any calories lost from consuming soda will instead be retained through continued consumption of other sugary products, such as fruit juices.⁵³ Further, many critics of the soda tax do not think that soda and other sweetened beverages should be taxed and restricted in the same manner as tobacco, often arguing that the health risks posed by soft drinks are not comparable to tobacco and do not warrant the same stigmatization.⁵⁴

Due to the controversy surrounding the effectiveness of soda taxes, many countries that have yet to implement a tax are hesitant to move forward with attempting to do so.⁵⁵ The Australian government, for example, has contemplated enacting a sugar or soda tax, sparked by its troubling obesity rates and high levels of SSB purchases.⁵⁶ Australia's "sugar and beverage

51. Carew Jr., *supra* note 47.

52. *Id.*

53. Katherine Loughead, *Soda Taxes are Not a Sensible Solution to Combat Obesity*, TAX FOUNDATION (May 17, 2018), <https://taxfoundation.org/soda-taxes-not-sensible-solution-combat-obesity/>; *Sweet Benefits of the Soda Tax*, *supra* note 48.

54. See Lindsay F. Wiley, *Shame, Blame, and the Emerging Law of Obesity Control*, 47 U.C. DAVIS L. REV. 121 (2013). Wiley notes that stigmatizing obesity and unhealthy behaviors, similar to the stigmatization of using tobacco products, may not be the best approach "for preventing obesity-related health problems." *Id.* at 125. It is also argued that, unlike the use of tobacco products, which are scientifically proven to cause health-related issues, soda consumption is not proven to cause health-related issues, such as childhood obesity. Mark Bittman, *Soda: A Sin We Sip Instead of Smoke?*, N.Y. Times (Feb. 13, 2010), <https://www.nytimes.com/2010/02/14/weekinreview/14bittman.html>.

55. See Ida Lim & Sharina Ahmad, *Malaysia Mulls Soda Tax Already Imposed by Other Asean Countries*, MALAYMAIL (Sept. 4, 2018), <https://www.malaymail.com/s/1668975/malaysia-mulls-soda-tax-already-imposed-by-other-asean-countries>.

56. Han, *supra* note 38. Researchers have found that Australia's high obesity rates can be attributed to its high consumption of SSBs and, therefore, Australia would benefit greatly from the implementation of a soda tax or SSB tax. *Id.*

industries,” however, have fought the enactment and implementation of such a tax.⁵⁷ Despite the resistance to a soda tax, the Australian Beverages Council (“Beverages Council”) took a step toward making soft drinks healthier in the country in June 2018.⁵⁸ The Beverages Council announced that it would attempt to reduce the amount of sugar in soft drinks by twenty percent by the year 2025.⁵⁹ While an important step toward reducing the prevalence of obesity within the country, the Australian Medical Association (AMA) has criticized this move, indicating that cutting the amount of sugar in soft drinks is not sufficient to reduce consumption.⁶⁰ Rather, the AMA believes that taxing sugar would be a much more effective means of realizing lower obesity rates and an overall healthier population.⁶¹

The hesitation to implement soda taxes reflects a general concern that, while soda taxes may aid in reducing consumption of sugary products and play a crucial role in lowering global obesity rates, such taxes alone are insufficient to reduce the prevalence of obese and overweight populations. Mexico’s soda tax has often been cited for its success in lowering consumption of soft drinks since its implementation.⁶² Additionally, the US city of Philadelphia began taxing sugary drinks in January 2017.⁶³ Philadelphia joined many other US cities that have enacted similar taxes, and its tax has so far proven effective in reducing consumption.⁶⁴ Specifically, Philadelphia’s tax has changed consumption habits, driving consumers toward drinking more water than soda.⁶⁵ Thus, it appears that soda and

57. *Id.*

58. Stephanie Dalzell, *Soft Drink Industry Pledges to Cut Sugar Overall, but Doctors Say it’s a Diversion from the Real Issue*, AUSTL. BROAD. CORP. (June. 25, 2018), <http://www.abc.net.au/news/2018-06-25/soft-drink-industry-pledge-to-cut-sugar-criticised-by-ama/9906502>.

59. *Id.*

60. *Id.*

61. *Id.*

62. Alexandra Sifferlin, *Does Taxing Soda Actually Stop People from Drinking It?*, TIME (Apr. 16, 2018), <http://time.com/5236621/soda-sugary-drink-tax/>.

63. *Id.*

64. *Id.*

65. Claire Sasko, *The Soda Tax Has Had a Huge Impact on Philly’s Soda-Drinking Habits, Suggests New Study*, PHILA. MAG. (Apr. 13, 2018), <https://www.phillymag.com/news/2018/04/13/philadelphia-soda-tax-people-drinking-less-soda/> [hereinafter Sasko, *Impact on Philly’s Soda-Drinking*

SSB taxes have at least been a successful starting point for nudging consumers towards selecting healthier alternatives.⁶⁶

II. THE IMPLEMENTATION OF SODA TAXES IN MEXICO

Prompted by staggering domestic obesity rates and increasing concern over public health issues, Mexico's Congress of the Union passed legislation enacting an SSB tax in October 2013.⁶⁷ In September 2013, when the tax was proposed, Mexico ranked number one in obesity in the world, with 32.8 percent of its adult population deemed obese.⁶⁸ This legislation was a necessary measure for addressing the country's obesity problem.

On January 1, 2014, Mexico's tax on SSBs went into force, hoping to shrink the current obesity rates and inhibit the epidemic from growing.⁶⁹ The rate of taxation on SSBs in Mexico is ten percent.⁷⁰ Within the first two years following enactment, Mexico saw a marked decrease in the purchase of SSBs.⁷¹ In

Habits]. Research from an American Journal of Preventive Medicine study found that Philadelphia's SSB tax reduced soda consumption by forty percent in just two months. *Id.* This lower soda consumption gave way to a fifty-eight percent increase in water consumption. *Id.*

66. *Taxing Sugar, A Nudge Toward Better Health*, BECKER FRIEDMAN INST. FOR ECON. AT U. CHICAGO (Nov. 24, 2015), <https://bfi.uchicago.edu/news/taxing-sugar-a-nudge-toward-better-health/>.

67. María Eugenia Bonilla-Chacín et al., *Learning from the Mexican Experience with Taxes on Sugar-Sweetened Beverages and Energy-Dense Foods of Low Nutritional Value*, WORLD BANK GROUP 1 (June 2016), <https://openknowledge.worldbank.org/bitstream/handle/10986/24701/Learning0from00cial0impact0analysis.pdf?sequence=1&isAllowed=y>. Mexico's Congress is known in Spanish as "Congreso General de los Estados Unidos Mexicanos" or "Legislatura del Congreso de la Unión." *Meet the New Mexican Congress and its Sixty-Fourth Legislature*, YUCATAN TIMES (Oct. 16, 2018), <https://www.theyucatanimes.com/2018/10/meet-the-new-mexican-congress-and-its-sixty-fourth-legislature/>.

68. Amy Guthrie, *Mexico Proposes Tax on Sugary Beverages*, WALL STREET J. (Sept. 9, 2013), <https://www.wsj.com/articles/mexico-proposes-tax-on-sugary-beverages-1378761628>; Alana D. Siegel, *NAFTA Largely Responsible for the Obesity Epidemic in Mexico*, 50 WASH. U. J.L. & POL'Y 195, 195, 195 n.2 (2016).

69. Bonilla-Chacín et al., *supra* note 67.

70. *Tax on Sugar-Sweetened Beverages in Mexico is Expected to Reduce Obesity, Diabetes*, UNIV. OF MICH. NEWS (May 17, 2017), <https://news.umich.edu/tax-on-sugar-sweetened-beverages-in-mexico-is-expected-to-reduce-obesity-diabetes/>.

71. Margot Sanger-Katz, *Sales Fall Again in Mexico's Second Year of Taxing Soda*, N.Y. TIMES (Feb. 22, 2017),

2014, there was a 5.5 percent decrease in the purchase of SSBs, followed by a 9.7 percent decrease in 2015.⁷² Despite this notable achievement in reducing soda consumption, an update on international obesity published by the Organization for Economic Cooperation and Development (OECD) reported that Mexico's obesity rate among adults in 2015 was still 32.4 percent.⁷³ This astonishing percentage meant that Mexico was still the second most obese country in the world.⁷⁴ Furthermore, as recently as 2017, the OECD projected that Mexico's obesity rates would continue to rise until 2030, and possibly beyond.⁷⁵

The stagnating obesity rates in Mexico raise the question of whether the tax on SSBs has effectively served its purpose in terms of reducing obesity. While there is a relationship between consumption of SSBs and obesity rates, SSBs, specifically soda, are not the sole contributor to unhealthy diets.⁷⁶ In addition to SSBs, Mexicans on average also consume many calories from foods lacking proper nutritional value, which contributes to the still very high obesity rates.⁷⁷ Especially in lower-income communities where household resources and food security can be an important determinant of what individuals consume, overweight and obese populations are extremely prevalent.⁷⁸ In such communities, people are more likely to choose

<https://www.nytimes.com/2017/02/22/upshot/soda-sales-fall-further-in-mexicos-second-year-of-taxing-them.html>.

72. M. Arantxa Colchero et al., *In Mexico, Evidence of Sustained Consumer Response Two Years After Implementing a Sugar-Sweetened Beverage Tax*, HEALTH AFFAIRS (Mar. 2017), <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2016.1231?journalCode=hlthaff>.

73. ORG. FOR ECON. COOPERATION AND DEV., OBESITY UPDATE 3 (2017) [hereinafter, OECD, OBESITY UPDATE]. The OECD mission involves shaping "policies that foster prosperity, equality, opportunity and well-being for all." *About the OECD*, OECD (2018), <http://www.oecd.org/about/>. The OECD works with governments to make positive, healthful changes in their countries by analyzing data concerning issues that affect infrastructure and the daily lives of populations. *Id.*

74. OECD, OBESITY UPDATE, *supra* note 73. Mexico's high obesity rate follows close in line with the US, which is the most obese country in world. *Id.*

75. *Id.* at 6.

76. Takako Ehara, *Mexico and Its Obesity Epidemic*, GLOBAL FOOD CULTURES: MEXICO 2018 BLOG (Apr. 11, 2018), <https://wp.nyu.edu/steinhardt-gfcmexico2018/2018/04/11/mexico-and-its-obesity-epidemic/>.

77. *Id.*

78. FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS ET AL., THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD 32 (2018),

foods and beverages that are high in calories but lack proper nutritional value.⁷⁹ This is because in Mexico, like many countries globally, unhealthy food options and unhealthy beverages are often easier to access and cheaper than healthier alternatives such as fruits, vegetables, and clean drinking water.⁸⁰

Thus, while a tax on SSBs in Mexico is surely going to reduce sugar consumption in lower income communities, this tax fails to address key contributors to the obesity problem, such as food insecurity.⁸¹ Ultimately, in addition to taxing SSBs, Mexico must begin enacting policies focused on facilitating better access to affordable, nutritious foods.⁸² For example, in San Cristóbal de las Casas, Mexico, “[p]otable water is increasingly scarce,” and Coca-Cola products tend to be more accessible than bottled water for the town’s residents.⁸³ Consequently, as long as Mexico remains complicit in the lack of safe and accessible drinking water in rural parts of its country, obesity rates will most likely continue to stagnate, and potentially rise, regardless of the enforcement of an SSB tax.⁸⁴

<http://www.fao.org/3/i9553en/i9553en.pdf>. Food insecurity plays a critical role in the conversation about obese and overweight populations because diets are “affected by the cost of food.” *Id.* “Nutritious, fresh foods often tend to be expensive,” consequently, driving consumers with limited financial resources to “choose less expensive foods that are often high in caloric density and low in nutrients.” *Id.* Additionally, those in lower income communities “are often less likely to have physical access to markets where they can buy nutritious and healthy foods at affordable prices.” *Id.*

79. *Id.*; Ehara, *supra* note 76.

80. Ehara, *supra* note 76; Jessica Tyler, *The Surprising Story of How the Former President of Mexico Helped Make Coca-Cola Such a Huge Part of Mexican Life that it’s Used in Religious Ceremonies and as Medicine*, BUS. INSIDER (Aug. 26, 2018), <https://www.businessinsider.com/coca-cola-influence-on-mexican-culture-2018-8#fox-said-that-some-of-his-first-donations-while-running-his-campaign-came-from-coca-cola-even-though-foxs-presidency-disappointed-many-mexicans-coca-colas-business-boomed-while-he-was-in-office-9>.

81. *Id.*

82. *Id.*

83. Oscar Lopez & Andrew Jacobs, *In Town With Little Water, Coca-Cola is Everywhere. So Is Diabetes.*, N.Y. TIMES (July 14, 2018), <https://www.nytimes.com/2018/07/14/world/americas/mexico-coca-cola-diabetes.html>.

84. *See* Ehara, *supra* note 76.

III. THE IMPLEMENTATION OF SODA TAXES THROUGHOUT EUROPE

Although soda taxes are more prevalent amongst European nations today, the first soft drink tax was passed in Finland in 1940.⁸⁵ A little over forty years later, Norway implemented a soda tax of its own.⁸⁶ As of September 2019, nine European nations have enacted taxes aimed at soft drinks.⁸⁷ This section will examine the implementation of these taxes in France, Belgium, and the United Kingdom and assess whether these taxes have led to a meaningful reduction in obesity rates.

A. An Examination of France's Soda Tax and Additional Health Policies to Address Obesity

France began implementing restrictions on access to soda and unhealthy snacks to address obesity concerns as early as 2004.⁸⁸ This initial government response was aimed at combating obesity in schools and was geared specifically toward removing vending machines containing sodas and junk food from middle and high schools.⁸⁹ Subsequently, in 2012, France implemented a tax on soda and other SSBs as another means of tackling obesity.⁹⁰ France levied its soda tax on manufacturers of SSBs, targeting “non-calorically sweetened beverages,” such as Diet Coke.⁹¹ The 2012 tax was imposed based on the size of the beverage’s container, at a rate of 0.0716 pence per liter.⁹²

85. Elke Asen, *Soda Taxes in Europe*, TAX FOUNDATION (Sept. 5, 2019), <https://taxfoundation.org/soda-taxes-europe-2019/>.

86. *Id.*

87. *Id.*

88. Mildrade Cherfils, *French Schools on Front Line of Obesity Fight*, PUB. RADIO INT'L (Sept. 8, 2010), <https://www.pri.org/stories/2010-09-08/french-schools-front-line-obesity-fight>.

89. *Id.*

90. Fabrice Etilé et al., *The Incidence of Soft-Drink Taxes on Consumer Prices and Welfare: Evidence from the French “Soda Tax” 2* (Paris Sch. of Econ., Working Paper No. 24, 2018).

91. *See id.* Non-calorically sweetened beverages include any beverages that are categorized as “diet” or “light.” *Id.*

92. *Countries with the Sugar Tax – How it's Changed Countries Around the World*, VERDICT (Apr. 6, 2018), <https://www.verdict.co.uk/sugar-taxes-changed-countries-around-world/> [hereinafter *Countries with the Sugar Tax*]; Sara Capacci et al., *The Impact of the French Soda Tax on Prices and Purchases. An Ex Post Evaluation*, PLOS ONE (Oct. 11, 2019), <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0223196&type=printable>.

More recently, in January 2017, France took further steps to reduce obesity rates by making it illegal for restaurants to offer unlimited soft drink refills.⁹³ Additionally, in October 2017, the French Ministry of Health announced its plan to amend the 2012 SSB tax, focusing on taxing SSBs based on sugar content, rather than on the size of the container.⁹⁴ The new measure went into effect on July 1, 2018.⁹⁵ Although it is too early to determine the impact this revised measure will have on obesity rates, it is already viewed as a success for effectively reducing the sugar contained in sodas, fruit juices, and other SSBs.⁹⁶

The policies implemented in France to tackle obesity have been effective.⁹⁷ Eurostat, the European Union's (EU) statistical office, published a 2016 report of EU adult obesity rates, in which the French were found to be, on average, less obese than other EU countries' populations.⁹⁸ In 2015, the WHO published a report showing that France's soda tax, like Mexico's, was reducing soda purchases and, ultimately, consumption.⁹⁹ Additionally, as recently as 2017, *The Telegraph*¹⁰⁰ reported that

93. Kimiko de Freytas-Tamura, *France Bans Free Soda Refills in Attack on Obesity*, N.Y. TIMES (Jan. 27, 2017), <https://www.nytimes.com/2017/01/27/world/europe/france-soda-refill-ban.html>; *Free Soda: France Bans Unlimited Sugary Drink Refills*, BBC NEWS (Jan. 27, 2017), <https://www.bbc.com/news/world-europe-38767941> [hereinafter *Free Soda*].

94. Katy Askew, *Industry Hits Out at 'Scapegoating' as France Amends Sugar Tax*, FOOD NAVIGATOR (Oct. 30, 2017), <https://www.foodnavigator.com/Article/2017/10/30/Industry-hits-out-at-scapegoating-as-France-amends-sugar-tax>.

95. *Sugary Drinks Tax in France Already Making Impact*, CONNEXION (Sept. 28, 2018), <https://www.connexionfrance.com/French-news/The-sugary-drinks-tax-in-France-already-making-a-positive-impact-says-MP>.

96. *Id.*

97. de Freytas-Tamura, *supra* note 93.

98. *European Health Interview Survey*, EUROSTAT (Oct. 20, 2016), <https://ec.europa.eu/eurostat/documents/2995521/7700898/3-20102016-BP-EN.pdf/c26b037b-d5f3-4c05-89c1-00bf0b98d646>. Eurostat provides statistics to countries in the EU to "enable comparisons between countries and regions . . ." *Overview*, Eurostat (last visited September 6, 2019), <https://ec.europa.eu/eurostat/about/overview>. The statistics gathered supply these countries with helpful data to carry out important policies designed to improve the well-being of their respective populations. *Id.*

99. See WHO, FISCAL POLICIES FOR DIET AND PREVENTION OF NONCOMMUNICABLE DISEASES: TECHNICAL MEETING REPORT (2016).

100. *A Rich and Unique History*, TELEGRAPH (2018), <https://corporate.telegraph.co.uk/about-us/>.

research indicated the French drink “fewer soft drinks per person than any other country in Western Europe bar Portugal.”¹⁰¹

France’s soda tax has successfully pushed consumers towards healthier alternatives, such as water, which has risen in consumption as a result of the tax.¹⁰² Unlike Mexico’s soda tax, France’s tax appears to be more successful in tackling obesity issues. The difference in outcomes between France and Mexico can be attributed, in part, to France’s inclusion of other measures to restrict access to soft drinks that accompanied the tax.¹⁰³ In addition to policies directly targeting soda, France’s lower obesity rates can be credited to other aspects of their diet.¹⁰⁴ For example, although the French diet is not what is traditionally considered to be healthy, the French typically eat smaller portions of meals when dining at restaurants.¹⁰⁵ This differs from restaurant dining in countries like the US where meals are typically served in large portions, and diners are thus more likely to overeat.¹⁰⁶

Furthermore, in 2011, France took another step towards making schools healthier by prohibiting ketchup and limiting French fries and chips in cafeterias.¹⁰⁷ By taking steps to con-

101. Henry Samuel, *France Enforces Ban on Unlimited Fizzy Drinks in Crackdown on Obesity*, TELEGRAPH (Jan. 27, 2017), <https://www.telegraph.co.uk/news/2017/01/27/france-enacts-ban-unlimited-soda-drinks/>.

102. *Countries with the Sugar Tax*, *supra* note 92.

103. See Samuel, *supra* note 101.

104. *Here’s Why France has the Lowest Rate of Obesity in the World*, NDTV FOOD (May 11, 2016), <https://food.ndtv.com/food-drinks/heres-why-france-has-the-lowest-rate-of-obesity-in-the-world-1405154>. Obesity tends to be less prevalent in France than in other countries like Mexico. *Id.* In Mexico, traditional diets are often characterized by indulgence in “carbohydrate-heavy” foods and drinks, including “tacos, tortas, and tamales,” as well as soft drinks. Sophie Hares, *Mexico Stumbles in Race Against Global Obesity Time-Bomb*, REUTERS (May 22, 2018), <https://www.reuters.com/article/us-mexico-food-health-feature/mexico-stumbles-in-race-against-global-obesity-time-bomb-idUSKCN1I0045>.

105. *Here’s Why France has the Lowest Rate of Obesity in the World*, *supra* note 104. The French diet is not traditionally characterized as “healthy” because the diet “is relatively high on saturated fats, alcohol and meat.” *Id.* Unlike Americans, however, the French tend to consume these products in moderation and generally live a more active lifestyle. *Id.*

106. *Id.*

107. *France Bans Unlimited Refills of Soda Drinks to Battle Bulging Obesity Levels*, LOCAL FR (Jan. 26, 2017), <https://www.thelocal.fr/20170126/france-fights-obesity-by-banning-unlimited-refills-of-soda>.

trol overconsumption of foods that lack nutritional value, the French are seeing marked success with obesity control.¹⁰⁸ As of 2016, OECD has reported that, while France's obesity rates have risen since 2000, its obesity rates remain lower than the OECD average.¹⁰⁹

B. Belgium: A Less Impactful Iteration of the Soda Tax

In January 2016, Belgium introduced a soda tax of its own.¹¹⁰ Belgium imposes the tax based on the soda's packaging size.¹¹¹ Initially, the tax was fairly limited in scope, aimed exclusively at placing a tax on soft drinks, such as Coca-Cola products.¹¹² Critics—including Coca-Cola's top executive in Belgium, Ben Bijnens¹¹³—spoke out against the tax, asserting that it was not an effective health measure.¹¹⁴ Bijnens and others who criticized the tax argued that in order for the tax to be beneficial to public health, it needed to expand its scope to include other sugary drinks, rather than singling out soda.¹¹⁵ Consequently, in January 2018, Belgium increased the existing tax on soft drinks, despite seeing a decrease in soft drink consumption

108. ORG. FOR ECON. COOPERATION AND DEV., HEALTH POLICY IN FRANCE (2016), <http://www.oecd.org/france/Health-Policy-in-France-January-2016.pdf> [hereinafter OECD, HEALTH POLICY IN FRANCE].

109. *Id.*

110. WORLD CANCER RESEARCH FUND INT'L, BUILDING MOMENTUM: LESSONS ON IMPLEMENTING A ROBUST SUGAR SWEETENED BEVERAGE TAX 4 (2018), <https://www.wcrf.org/sites/default/files/PPA-Building-Momentum-Report-WEB.pdf>; *Countries with the Sugar Tax*, *supra* note 92.

111. WORLD CANCER RESEARCH FUND INT'L, USE ECONOMIC TOOLS TO ADDRESS FOOD AFFORDABILITY AND PURCHASE INCENTIVES (2018), <https://www.wcrf.org/sites/default/files/Use-economic-tools.pdf> [hereinafter, WCRFI, USE ECONOMIC TOOLS].

112. *Excise Hike on Soft Drinks*, FLANDERS NEWS (Dec. 30, 2017), https://www.vrt.be/vrtnws/en/2017/12/30/excise_hike_on_softdrinks-1-3121462/; *Tax on Sweetened Drinks: Belgian Government Under Fire from Coca-Cola*, BRUSSEL TIMES (Jan. 20, 2016), <http://www.brusselstimes.com/belgium/politics/4954/tax-on-sweetened-drinks-belgian-government-under-fire-from-coca-cola>.

113. Ben Bijnens (Ben Bijnens), LinkedIn (Dec. 26, 2018), <https://be.linkedin.com/in/ben-bijnens-33658433>. Ben Bijnens is the current general manager of Coca-Cola for Benelux. *Id.*

114. *Coca Cola: Belgian Sugar Tax Just to Fill State Coffers*, FLANDERS NEWS (Jan. 20, 2016), https://www.vrt.be/vrtnws/en/2016/01/20/coca_cola_belgiansugartaxjusttofillstatecoffers-1-2551091/.

115. *Id.*

throughout 2017.¹¹⁶ The 2018 tax increase expanded the scope of beverages that would be included, even targeting beverages with minimal amounts of added sugar.¹¹⁷ Thus, in addition to sodas, the tax now encompasses beverages like teas, as well as some healthy drinks that contain “the slightest inclusion of sugar.”¹¹⁸

Although Belgium, like Mexico, has seen decreased soda consumption, it is noteworthy that this decrease has been minimal.¹¹⁹ A 2017 OECD report found that over fifty percent of Belgium’s population aged fifteen and older were obese or overweight.¹²⁰ The fact that soda and sugary drink consumption is not substantially decreasing and the country’s obesity rate remains startling, raises concern over the tax’s impact and efficacy.¹²¹

The soft drink industry continues to criticize the soda taxes in Belgium and other European countries, deeming them to be ineffective obesity control measures.¹²² These companies suggest that, rather than taxation, products should be reformulated with less sugar and packaged in smaller portions.¹²³ As Belgium’s tax continues to evolve, it needs to be taken a step further to have a stronger effect on changing consumption and reducing the rate of obesity.¹²⁴ One approach Belgium could take is to implement initiatives similar to those in France, including

116. See EUROMONITOR INT’L, *SOFT DRINKS IN BELGIUM* (March 2018), <https://www.euromonitor.com/soft-drinks-in-belgium/report>; *Excise Hike on Soft Drinks*, *supra* note 112.

117. *Excise Hike on Soft Drinks*, *supra* note 112; *Countries with the Sugar Tax*, *supra* note 92.

118. *Excise Hike on Soft Drinks*, *supra* note 112; *Countries with the Sugar Tax*, *supra* note 92.

119. *Countries with the Sugar Tax*, *supra* note 92. After the tax went into effect in January 2016, soft drink consumption appeared to decrease slightly, from approximately 1400 million liters in 2015 to approximately 1390 million liters in 2016. *Consumption and Sales*, UNESDA SOFT DRINKS EUROPE, <https://www.unesda.eu/consumption/> (last visited Oct. 13, 2019). In 2017, just one year after the initial tax was enacted, however, SSB consumption rose again to approximately 1406 million liters. *Id.*

120. ORG. FOR ECON. COOPERATION AND DEV., *OVERWEIGHT OR OBESE POPULATION* (2017), <https://data.oecd.org/healthrisk/overweight-or-obese-population.htm> [hereinafter OECD, *OVERWEIGHT OR OBESE POPULATION*].

121. *See id.*; *Countries with the Sugar Tax*, *supra* note 92.

122. Michalopoulos, *supra* note 46.

123. *Id.*

124. *See id.*

restricting access to soda in schools and restaurants. Belgium could also follow in the steps of Mexico and add an additional tax on foods that do not provide nutritional value. Whatever route it chooses next, however, Belgium must begin to design and implement additional health policies to couple with the current tax in order to effectively reduce obesity.¹²⁵

C. United Kingdom: A Model for Countries Looking to Effectively Utilize SSB Taxes

The UK announced its own sugary drinks tax in 2016 in an effort to curb childhood obesity.¹²⁶ The UK's soda tax, unlike other countries' SSB taxes, is not focused solely on reducing soda consumption.¹²⁷ Rather, the UK's tax is also designed to encourage soda manufacturers to lower sugar content in their products in order to avoid, or at least minimize, taxation.¹²⁸ Additionally, the UK's soda tax has different rates of taxation depending on the amount of sugar contained in the particular soda product.¹²⁹ The different rates encourage manufacturers to sell products with lower amounts of sugar in order to avoid the higher rate of taxation or to be exempt from taxation completely.¹³⁰

125. Michalopoulos, *supra* note 46.

126. Ivana Kottasova, *Soda Wars: The UK's Tax on Sugary Drinks is Working*, CNN BUSINESS (Mar. 9, 2017), <https://money.cnn.com/2017/03/09/news/economy/soda-tax-uk-sugar-revenue/>.

127. Caitlin Dewey, *Why the British Soda Tax Might Work Better Than Any of the Soda Taxes That Came Before*, WASH. POST (Mar. 21, 2018), https://www.washingtonpost.com/news/wonk/wp/2018/03/21/why-the-british-soda-tax-might-work-better-than-any-of-the-soda-taxes-that-came-before-it/?noredirect=on&utm_term=.103257a5282a.

128. *Id.*

129. Cathy Siegner, *Would a UK-Style Soda Tax Reduce Sugar in US Beverages?*, FOOD DIVE (Mar. 23, 2018), <https://www.fooddiver.com/news/would-a-uk-style-soda-tax-reduce-sugar-in-us-beverages/519809/>.

The lower rate is about 6 cents per serving and will apply to products with about 12 to 19 grams of sugar per 8-ounce can. The higher rate will be about 8 cents per serving and will apply to those beverages with more than 19 grams of sugar per can. . . .

Id. Any products with less than five grams of sugar per one hundred milliliters are excluded under the tax. *Id.* Sugary drinks like fruit juices are also exempt from taxation. *Id.*

130. *Id.*

Despite not entering into force until April 6, 2018, the UK soda tax had already been lauded for its pre-implementation success.¹³¹ In the wake of announcing the tax, some of the biggest soda companies in the UK, such as Coca-Cola and San Pellegrino, responded by reformulating product recipes with lower sugar levels.¹³² By the time the tax became effective, just over two years after its announcement, more than fifty percent of soda manufacturers had changed their formulas.¹³³

Within the first seven months of its enactment, the new tax raised 154 million euros, which the country will use “to tackle childhood obesity and to fund physical education activities and breakfast clubs in schools.”¹³⁴ In addition to raising substantial tax revenue that can be used to implement a holistic initiative to curb obesity, the tax has also significantly impacted consumer habits.¹³⁵ For example, the sale of Coke Zero Sugar increased by fifty percent, while sales of the “full sugar Classic Coke” fell as a result of the tax.¹³⁶ While it is too early to determine how the soda tax will fare in terms of reducing obesity rates, the early victories of the tax inspire hope for its future success in achieving a healthier and less obese population.¹³⁷ Further, the tax’s quick success illustrates that focusing primarily on sugar content when enacting an SSB tax may prove more effective over time than the per ounce approaches, such as those currently utilized in Mexico, Belgium, and the US.

131. Dewey, *supra* note 127; Kottasova, *supra* note 126.

132. Dewey, *supra* note 127; Kottasova, *supra* note 126.

133. Martinne Geller, *Britain’s Sugar Tax on Soft Drinks Comes into Effect*, REUTERS (Apr. 6, 2018), <https://www.reuters.com/article/us-britain-sugar/britains-sugar-tax-on-soft-drinks-comes-into-effect-idUSKCN1HD1K2>. The British Treasury reported that “[t]he tax, announced in March 2016, has already cut sugar content in drinks by 45 million kg per year . . . as over 50 percent of manufacturers have reformulated their products to be below the levy’s sugar threshold.” *Id.*

134. Madison Marriage, *UK Sugar Tax Raises Well Under Half Forecast Amount*, FIN. TIMES (Nov. 20, 2018), <https://www.ft.com/content/091b9a38-ecd2-11e8-8180-9cf212677a57>.

135. See Jack Winkler & Tam Fry, *UK Sugar Tax: Historical Sales Shift to Sugar-Free*, BEVERAGEDAILY (May 21, 2019), <https://www.beveragedaily.com/Article/2019/05/21/UK-sugar-tax-sees-historic-sales-shift-to-sugar-free>.

136. *Id.*

137. Kottasova, *supra* note 126.

IV. THE IMPLEMENTATION OF SODA TAXES IN THE UNITED STATES

The United States does not currently have a federal, unified approach to taxing SSBs, nor have any states implemented SSB taxes.¹³⁸ Rather, the imposition of SSB taxes has been left to cities across the nation to enact, if their local legislatures vote to do so.¹³⁹ As of October 2019, seven cities have enacted SSB taxes based on the volume of the beverage, rather than on sugar content.¹⁴⁰ This section will first examine two successful soda taxes implemented in the US cities of Berkeley, California and Philadelphia, Pennsylvania. This section will then examine one of the first proposals for a soda tax in the US, assessing New York State's failed attempt to pass such a tax and how it should look to other US cities as a model for taxation or find effective ways to nudge consumers toward healthier alternatives.

A. The First US City to Enact a Soda Tax: Berkeley, California

In November 2014, Berkeley, California became the first US city to pass an SSB tax in an effort to control the obesity and diabetes epidemic facing its population.¹⁴¹ The tax, encompassing sodas and other pre-sweetened drinks, placed a one cent per ounce tax on such beverages.¹⁴² Berkeley's SSB tax went into effect in March 2015 and has successfully reduced soda

138. *State and Local Finance Initiative*, URBAN INST., <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/soda-taxes> (last visited Oct. 13, 2019).

139. *Id.*

140. *Id.* Currently, SSB taxes are levied in the following seven US cities: Albany, California; Berkeley, California; Oakland, California; San Francisco, California; Boulder, Colorado; Philadelphia, Pennsylvania; Seattle, Washington. *Id.*

141. Ronnie Cohen, *Berkeley Soda Tax Takes Big Gulp Out of Sugary-Drink Sales*, REUTERS (Apr. 19, 2017), <https://www.reuters.com/article/us-health-soda-tax/berkeley-soda-tax-takes-a-big-gulp-out-of-sugary-drink-sales-idUSKBN17L2RU>; *First City in the United States: Berkeley's Tax on Sugar-Sweetened Beverages*, HEALTHY BERKELEY, <http://www.healthyberkeley.com/about-berkeleys-tax-ordinance/> (last visited Dec. 26, 2018).

142. Laura Mandaro, *Nation's First Soda Tax is Passed*, USA TODAY (Nov. 5, 2014), <https://www.usatoday.com/story/news/nation-now/2014/11/05/berkeley-passes-soda-tax/18521923/>; *First City in the United States: Berkeley's Tax on Sugar-Sweetened Beverages*, *supra* note 141.

consumption, seeing a ten percent decrease in SSB sales.¹⁴³ This tax also encouraged Berkeley's population to drink more water, reflected by a 15.6 percent rise in bottled water sales.¹⁴⁴ A University of California, Berkeley study further found that, among low-income neighborhoods, there was a twenty-one percent decrease in SSB consumption in the year following the tax's enactment.¹⁴⁵

Despite the obvious success in driving consumers to choose healthier beverage options, and subsequently decreasing soda sales significantly, it is unclear whether the tax has done anything to lower obesity rates.¹⁴⁶ According to the American Beverage Association (ABA),¹⁴⁷ there have not been substantial findings demonstrating that taxes on soda provide for a "meaningful reduction in obesity rates."¹⁴⁸ Despite this, many health experts, such as Dr. Lynn Silver,¹⁴⁹ state that the SSB tax is effective and incentivizes Berkeley residents to make healthier selections when purchasing beverages.¹⁵⁰ Until there is more data regarding the impact of SSB's on obesity rates, it will be

143. Cohen, *supra* note 141.

144. Sarah Boseley, *First US Sugar Tax Sees Soft Drink Sales Fall by Almost 10%, Study Shows*, GUARDIAN (Apr. 18, 2017), <https://www.theguardian.com/society/2017/apr/18/first-us-sugar-tax-sees-soft-drink-sales-fall-by-almost-10-study-shows>; Cohen, *supra* note 141.

145. Yasmin Anwar, *Soda Tax Linked to Drop in Sugary Beverage Drinking in Berkeley*, UC BERKELEY NEWS (Aug. 23, 2016), <https://news.berkeley.edu/2016/08/23/sodadrinking/>.

146. Bruce Y. Lee, *In Berkeley, Soda Tax is Doing What It's Supposed to Do*, FORBES (Apr. 18, 2017), <https://www.forbes.com/sites/brucelee/2017/04/18/in-berkeley-soda-tax-is-doing-what-its-supposed-to-do/#22aaed012cae>.

147. *About Us*, AMERICAN BEVERAGE ASS'N, <https://www.ameribev.org/about-us/> (last visited Dec. 26, 2018). The American Beverage Association was established in 1919 and represents the "non-alcoholic beverage industry" in the US. *Id.*

148. Lee, *supra* note 146.

149. *Id.* Dr. Lynn Silver is a researcher at the Public Health Institute who conducted a study, with others, to determine the effects of the SSB tax on SSB purchases in Berkeley. *Id.*

150. David Mills, *Soda Tax Appears to be Working in Berkeley*, HEALTHLINE (Apr. 18, 2017), <https://www.healthline.com/health-news/soda-tax-works-in-berkeley#3>; *One Year Later: Berkeley's 'Soda Tax' Significantly Reduced Sales of Sugary Drinks*, UNC GILLINGS SCHOOL NEWS (Apr. 18, 2017), <https://sph.unc.edu/sph-news/one-year-later-berkeleys-soda-tax-significantly-reduced-sales-of-sugary-drinks/>.

difficult to definitively determine whether Berkeley's tax has met its objective of curbing obesity.¹⁵¹

B. Philadelphia, Pennsylvania: An Examination of a Major US City's Soda Tax Implementation

Philadelphia, Pennsylvania followed Berkeley's example and passed a soda tax in June 2016, making it the first major US city to do so.¹⁵² At that time, it was reported that "68% of adults and 41% of children" in Philadelphia were obese or overweight,¹⁵³ with obesity rates continuing to rise.¹⁵⁴ Philadelphia aimed to tax not only soda, but all non-alcoholic beverages made with sugary sweeteners or artificial sugars.¹⁵⁵ The tax

151. Fredericka McGee, *Commentary: Soda Tax No Panacea for Obesity Problems*, SAN DIEGO UNION-TRIBUNE (July 5, 2017), <http://www.sandiegouniontribune.com/opinion/commentary/sd-utbg-soda-tax-california-20170705-story.html>.

152. *Philadelphia Becomes First Major US City with a Soda Tax*, GUARDIAN (June 16, 2016), <https://www.theguardian.com/us-news/2016/jun/16/philadelphia-passes-soda-tax-first-city-sugar>.

153. *Id.*

154. 2016 COMMUNITY HEALTH ASSESSMENT (CHA), PHILADELPHIA, PA, PHILADELPHIA DEPARTMENT OF PUBLIC HEALTH 8 (2016), https://www.phila.gov/health/pdfs/2016%20CHA%20Slides_updatedPHC4.pdf

155. *Philadelphia Beverage Tax*, CITY OF PHILADELPHIA (2018), <https://www.phila.gov/services/payments-assistance-taxes/business-taxes/philadelphia-beverage-tax/> [hereinafter *Philadelphia Beverage Tax*]; Phila., Pa., Ordinances ch. 19-4100, §19-4101 (2018).

§19-4101. Definitions:

(3) Sugar-sweetened beverage.

(a) Any non-alcoholic beverage that lists as an ingredient:

(1) any form of caloric sugar-based sweetener, including, but not limited to, sucrose, glucose or high fructose corn syrup; or

(2) any form of artificial sugar substitute, including stevia, aspartame, sucralose, neotame, acesulfame potassium (Ace-K), saccharin, and advantame.

(b) Any non-alcoholic syrup or other concentrate that is intended to be used in the preparation of a beverage and that lists as an ingredient:

(1) any form of caloric sugar-based sweetener, including, but not limited to, sucrose, glucose or high fructose corn syrup; or

therefore encompassed soda, fruit juices, and many other SSBs.¹⁵⁶ These beverages would be taxed at a rate of one and a half cents per ounce.¹⁵⁷

Philadelphia's soda tax went into effect in January 2017.¹⁵⁸ Prior to its implementation, the ABA filed a lawsuit in September 2016 arguing that the tax was unconstitutional and should be barred from enactment.¹⁵⁹ After losing twice in courts below, Pennsylvania's Supreme Court ultimately held that the tax on SSBs was valid.¹⁶⁰ Unlike NYC's soda ban,¹⁶¹ as will be discussed below, Philadelphia's soda tax survived,¹⁶² much to proponents' delight.¹⁶³

(2) any form of artificial sugar substitute, including stevia, aspartame, sucralose, neotame, acesulfame potassium (Ace-K), saccharin, and advantame.

(c) . . .

(d) Examples of sugar-sweetened beverages include, but are not limited to, soda; non-100%-fruit drinks; sports drinks; flavored water; energy drinks; pre-sweetened coffee or tea; and non-alcoholic beverages intended to be mixed into an alcoholic drink . . .

Id.

156. *Philadelphia Beverage Tax*, *supra* note 155.

157. *Id.*

158. Maria Armental, *Philadelphia's Soda Tax Goes to Court: What You Need to Know*, WALL STREET J. (May 15, 2018), <https://www.wsj.com/articles/philadelphias-soda-tax-goes-to-court-what-you-need-to-know-1526385600>.

159. Claire Sasko, *American Beverage Association Files Soda-Tax Lawsuit*, PHILA. MAG. (Sept. 14, 2016), <https://www.phillymag.com/news/2016/09/14/soda-tax-lawsuit/>.

160. *Williams v. City of Pa.*, 188 A.3d 421, 437 (Pa. 2018). Prior to the ABA's appeal before Pennsylvania's Supreme Court, the tax was upheld by Pennsylvania's Common Pleas Court, and that decision was affirmed by Pennsylvania's Commonwealth Court. *Id.* at 425–26, 427; Claire Sasko, *Beverage Groups Takes Soda Tax Lawsuit to Pa. Supreme Court*, PHILA. MAG. (July 18, 2017), <https://www.phillymag.com/news/2017/07/18/soda-tax-lawsuit-supreme-court/>.

161. *N.Y. Statewide Coal. of Hisp. Chambers of Com. v. N.Y. City Dep't of Health and Mental Hyg., et al.*, 23 N.Y.3d 681, 690, 701 (2014).

162. *Williams*, 188 A.3d at 437.

163. John Bacon, *Push for Soda Taxes Across USA Notches Win in Philly*, USA TODAY (July 18, 2018), <https://www.usatoday.com/story/news/nation/2018/07/18/philly-soda-tax-survives-court-challenge/796104002/>.

Despite the contentious debate over the soda tax, in the relatively short time that Philadelphia's iteration has been in effect, it has positively reduced soda and sugary drink consumption in the city.¹⁶⁴ A 2018 study¹⁶⁵ performed by researchers at Drexel University¹⁶⁶ found that within two months of the tax's enactment, daily soda consumption had already fallen by forty percent.¹⁶⁷ Additionally, the study found that "residents were fifty-eight percent more likely to drink bottled water every day."¹⁶⁸ Since the publication of that study, Philadelphia has continued to see a positive reduction in consumption, noting a thirty-eight percent decrease in SSB sales reported in May 2019.¹⁶⁹

Although the SSB tax has significantly changed soda consumption habits for the better, it is too early to determine whether the tax will lead to lower obesity rates.¹⁷⁰ Between 2017, when the tax went into effect, and 2018, one year following enactment, the decline in Philadelphia's adult obesity rate was minimal.¹⁷¹ While any decrease in obesity rates is positive, Philadelphia should attempt to enact other health initiatives that could aid in its fight against obesity. For example, obesity rates amongst children ages ten to seventeen have increased in the city from 14.2 percent in 2014 to 17.4 percent between 2017

164. Sasko, *Impact on Philly's Soda-Drinking Habits*, *supra* note 65.

165. See Yichen Zhong et al., *The Short-Term Impacts of the Philadelphia Beverage Tax on Beverage Consumption*, 55 AM. J. OF PREVENTIVE MED. 26, 26–34 (2018). A study published in July 2018 in the American Journal of Preventive Medicine surveyed consumption of SSBs by residents of Philadelphia immediately following the implementation of the SSB tax. *Id.* The study found "daily consumption of regular soda was 40% lower. . . ; energy drink [consumption] was 64% lower. . . ; and the 30-day regular soda consumption frequency was 38% lower. . ." *Id.*

166. *Overview*, DREXEL UNIVERSITY (2018), <https://drexel.edu/difference/overview/>.

167. Sasko, *Impact on Philly's Soda-Drinking Habits*, *supra* note 65.

168. Sifferlin, *supra* note 62.

169. Angelica LaVito, *Sugary Drink Sales in Philadelphia Fall 38% After City Adopted Soda Tax, Study Finds*, CNBC (May 14, 2019), <https://www.cnbc.com/2019/05/14/sugary-drink-sales-fall-38percent-after-philadelphia-levied-soda-tax-study.html>.

170. *Id.*

171. The State of Obesity in Pennsylvania, STATE OF CHILDHOOD OBESITY, <https://stateofchildhoodobesity.org/states/pa/> (last visited Oct. 13, 2019). Data published by State of Childhood Obesity reflected a 0.7 percent decrease in Philadelphia's adult obesity rate from 2017, when it was 31.6 percent, down to 30.9 percent in 2018. *Id.*

and 2018.¹⁷² Thus, Philadelphia should adopt initiatives similar to those implemented in France and restrict access to SSBs and unhealthy foods in schools, as a means to address the steadily increasing child obesity rates. Additionally, like the UK, which is utilizing SSB tax revenue to fund nutritious programs in schools,¹⁷³ Philadelphia should use the SSB tax revenue to implement educational programs for children to promote physical activity and teach children nutritious dietary habits. By taking this additional step to address the implications of unhealthy lifestyles among children, Philadelphia can help a younger generation form healthier habits, including habits that do not involve excessive consumption of sodas and other SSBs.

C. A Look at One of the First Attempts to Enact a Soda Tax in the US: New York State's Failed Soda Tax and New York City's Failed Soda Ban

Although the US cities of Berkeley and Philadelphia have implemented SSB taxes to varying degrees of success, not all US states and cities could achieve the same. As early as 2010, New York State's then-governor, David Patterson, proposed a soda tax as a necessary step toward curbing obesity rates and controlling obesity-related healthcare costs.¹⁷⁴ This tax proposal was later supported by then-New York City (NYC) mayor, Michael Bloomberg, who agreed that research indicated soda taxes were an effective measure for controlling obesity rates and reducing associated medical expenditures.¹⁷⁵ Patterson's proposal, however, faced opposition from many who believed that a soda tax would not make a difference in health

172. *Id.*

173. Marriage, *supra* note 134.

174. J. Angelo DeSantis, *Formulating a Soda Tax Fit for Consumption: A Pragmatic Approach to Implementing the Failed New York Soda Tax*, 16 MICH. ST. U. J. MED. & L. 363, 367 (2012); Phil Wahba, *New York Governor Defends Soda Tax*, REUTERS (Mar. 8, 2010), <https://www.reuters.com/article/us-newyork-tax-s/new-york-governor-defends-soda-tax-idUSTRE6275ZU20100308>.

175. A.G. Sulzberger, *Bloomberg Says a Soda Tax 'Makes Sense'*, N.Y. TIMES (Mar. 7, 2010), <https://www.nytimes.com/2010/03/08/nyregion/08soda.html>.

outcomes.¹⁷⁶ Despite some support from health advocates, legislators ultimately rejected Patterson's proposed tax.¹⁷⁷

Subsequently, in May 2012, Mayor Bloomberg proposed NYC's Sugary Drinks Portion Cap Rule ("Portion Cap Rule").¹⁷⁸ At that time, NYC's Obesity Task Force¹⁷⁹ reported that almost half of NYC's adult population was considered obese or overweight.¹⁸⁰ Therefore, like many of the SSB taxes around the globe, the ban was aimed at improving public health and tackling NYC's obesity epidemic¹⁸¹ by targeting soda and many other pre-sweetened beverages.¹⁸² Rather than taxing the sale of soda and other SSBs, the Portion Cap Rule prohibited the sale of SSBs in "any cup or bottle . . . larger than [sixteen] fluid ounces."¹⁸³

In September 2012, the NYC Board of Health approved Mayor Bloomberg's proposed Portion Cap Rule, and it was sub-

176. Wahba, *supra* note 174. "New York bottlers and vendors" opposed the enactment of a soda tax by New York State. *Id.*

177. *Id.* While there was greater opposition than support for the potential soda tax, "health care unions and professionals and advocates for better health . . . generally support[ed] the tax on sugared drinks." Joseph Berger, *New Strategy for Soda Tax Gives Diet Drinks a Break*, N.Y. TIMES (May 19, 2010), <https://www.nytimes.com/2010/05/20/nyregion/20sodatax.html>.

178. *Statewide Coal.*, 23 N.Y.3d at 690. The Portion Cap Rule defines sugary beverages as "a nonalcoholic beverage that 'is sweetened by the manufacturer or establishment with sugar or another caloric sweetener. . . ." *Id.*; Hery Min, *Large-Sized Soda Ban as an Alternative to Soda Tax*, 23 CORNELL J. L. & PUB. POL'Y 187, 190 (2013). The Portion Cap Rule was largely referred to as the "Soda Ban." *Id.*

179. OBESITY TASK FORCE, REVERSING THE EPIDEMIC: THE NEW YORK CITY OBESITY TASK FORCE PLAN TO PREVENT AND CONTROL OBESITY 2, 3 (2012), http://www.nyc.gov/html/om/pdf/2012/otf_report.pdf. The Obesity Task Force was organized to make recommendations for solutions to NYC's obesity problem. *Id.* at 2. The Obesity Task Force was comprised of multiple city agencies, including the Health and Human Services and the Department of Education. *Id.* at 2–3. Together, the representatives of these agencies looked for effective programs that would not only reduce obesity, but also solve health care issues facing the population as a whole. *Id.*

180. *Id.* at 4.

181. Min, *supra* note 178, at 208.

182. Michael M. Grynbaum, *New York Plans to Ban Sale of Big Sizes of Sugary Drinks*, N.Y. TIMES (May 30, 2012), <https://www.nytimes.com/2012/05/31/nyregion/bloomberg-plans-a-ban-on-large-sugared-drinks.html>; Min, *supra* note 178, at 191.

183. Grynbaum, *supra* note 182; *see also* Min, *supra* note 178, at 190–91.

sequently set to be codified in the NYC Health Code.¹⁸⁴ The Portion Cap Rule was scheduled to enter into effect in March 2013.¹⁸⁵ Less than one month after the Portion Cap Rule was approved in September 2012, however, six petitioners sought declaratory judgment invalidating it.¹⁸⁶ Ultimately, New York's Court of Appeals held that the Portion Cap Rule was invalid due to the NYC Board of Health exceeding its authority.¹⁸⁷

New York State and NYC were never able to realize the benefits that may have come from a soda tax or Portion Cap Rule.¹⁸⁸ As of 2016, the CDC reported that throughout New York, over fifty percent of its adult population was overweight or obese.¹⁸⁹ While there have not yet been further initiatives toward implementing soda taxes since the failure of the Portion Cap Rule, it would be beneficial for New York State and NYC to look to other US cities, such as Philadelphia and Berkeley, as a

184. Shi-Ling Hsu, *A Cost-Benefit Analysis of Sugary Drink Regulation in New York City*, 10 J. FOOD L. & POL'Y 73, 74 (2014). The Portion Cap Rule was to be added to NYC's Health Code as section 81.53 and would have codified the prohibition on the sale of SSBs "in containers exceeding sixteen ounces." *Id.* The prohibition would have applied to "food service establishments," "includ[ing] restaurants, movie theaters, sports venues, coffee shops, pizza shops, delicatessens, food trucks, and street carts." *Id.* To comply with the Portion Cap Rule, those establishments would have been required to ensure that all SSBs encompassed within the tax would not be sold at their establishments in containers exceeding sixteen fluid ounces. N.Y.C., N.Y. Health Code § 81.53(b) (2012) (repealed 2014). Additionally, these establishments could not "sell, offer, or provide" self-service cups." *Id.* at (c); Min, *supra* note 178, at 192–93.

185. *Statewide Coal.*, 23 N.Y.3d at 690.

186. *Id.* at 691. Six petitioners, including "not-for-profit and labor organizations," brought suit against respondents, the Board of Health, Department of Health and Mental Hygiene, and its Commissioner. *Id.*

187. *Id.* at 690, 701. The Court of Appeals held that "the New York City Board of Health exceeded the scope of its regulatory authority by adopting the Portion Cap Rule." *Id.* at 701. The court reasoned that "[b]y choosing among competing policy goals, without any legislative delegation or guidance, the Board engaged in law-making and thus infringed upon the legislative jurisdiction of the City Council of New York." *Id.* at 690.

188. Alison Burdo, *N.Y.C. Couldn't Get A Soda Tax Passed, but This City Just Did*, N.Y. BUS. J. (June 17, 2016, 10:00AM), <https://www.bizjournals.com/newyork/news/2016/06/17/n-y-c-couldnt-get-a-soda-tax-passed-but-this-city.html>.

189. CENT. FOR DISEASE CONTROL AND PREVENTION, NEW YORK: STATE OF NUTRITION, PHYSICAL ACTIVITY, AND OBESITY PROFILE 2 (2016), <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/profiles/pdfs/new-york-state-profile.pdf>.

model for developing a legally sufficient solution to tackling their still prevalent obese and overweight populations through the taxation of soft drinks. Even if an SSB tax is not an option, either the state or NYC could attempt to lower the price of bottled water as compared to the price of soda. Since bottled water consumption rises in other cities when soda prices are more expensive,¹⁹⁰ this may be a more favorable way to drive New York consumers toward choosing water over SSBs, without actually placing a tax on SSBs.

V. ASSESSING GLOBAL SODA TAXES: NEXT STEPS IN THE FIGHT AGAINST THE GLOBAL OBESITY EPIDEMIC

Around the world, countries are experiencing an unprecedented rise in obesity rates.¹⁹¹ Through the enactment of taxes targeting soda and other SSBs, countries have taken important strides toward addressing obesity and other health problems attributable to overconsumption of sugary products.¹⁹² As exemplified by Mexico, France, Belgium, the UK, and the US cities of Berkeley and Philadelphia, soda and SSB taxes have proven successful in reducing consumption.¹⁹³ It is evident that taxation has been a critical starting point for opening up the conversation about SSBs and their detrimental effects on public health.¹⁹⁴

Not all countries that have enacted SSB taxes, however, have seen obesity rates fall in the expected manner.¹⁹⁵ Mexico and Belgium still have high obesity rates, despite reducing soda and SSB sales.¹⁹⁶ In Berkeley and Philadelphia, there is still not enough research showing that their respective taxes have positively impacted obesity rates.¹⁹⁷ These findings illustrate

190. Boseley, *supra* note 144; Sifferlin, *supra* note 62.

191. *Obesity and Overweight*, *supra* note 21.

192. *Tax Soda to Help Fight Obesity*, BLOOMBERG (May 14, 2018), <https://www.bloomberg.com/opinion/articles/2018-05-14/tax-soda-and-other-sugary-drinks-to-fight-obesity>.

193. Cohen, *supra* note 141; Samuel, *supra* note 101; Sanger-Katz, *supra* note 71; Sasko, *Impact on Philly's Soda-Drinking Habits*, *supra* note 65.

194. See Liz Tung, *Do Soda Taxes Help or Hurt the Poor?*, PULSE (June 21, 2018), <https://why.org/segments/do-soda-taxes-help-or-hurt-the-poor/>.

195. OECD, OBESITY UPDATE, *supra* note 73, at 6; OECD, OVERWEIGHT OR OBESE POPULATION, *supra* note 120.

196. OECD, OBESITY UPDATE, *supra* note 73; *Countries with the Sugar Tax*, *supra* note 92.

197. See Lee, *supra* note 146; Sifferlin, *supra* note 62.

that enacting taxes, without more, is ineffective. Thus, it is imperative that countries with soda taxes, and those looking to enact such taxes, propose legislation that regulates the SSB industry and compels consumers to choose healthier options. Furthermore, it is essential for governments to make alternatives to SSBs more affordable for members of all economic classes.¹⁹⁸

A. Additional Health Policies to Supplement Soda Taxes

Soda taxes must be coupled with health policies that turn consumers away from SSBs and other unhealthy products.¹⁹⁹ Countries that only have SSB taxes, or have minimal health policies beyond an SSB tax, need to enact legislation to facilitate more robust public health policies. Necessary changes to current policies might include restricting access to unhealthy products in schools, limiting advertisements of unhealthy products, and revising existing policies to focus more on the sugar content in SSBs, rather than the size of the beverage container. By taking these extra steps, countries may begin to see a more significant decline in obesity rates.

1. Limiting Access to Foods and Drinks Based on the French Model

The health laws in France have paved the way toward improving its population's health, and they are a useful starting point for guiding other countries in passing new legislation to accompany soda taxes.²⁰⁰ Unlike other countries, France did not initially begin its efforts against obesity with a tax.²⁰¹ Rather, it started by limiting the avenues through which children and teens could obtain sugary products in schools.²⁰² These pol-

198. Ehara, *supra* note 76.

199. *Id.*

200. See generally Ben McPartland, *France Tackles Obesity by Hiking 'Soda Tax' on Sugary Drinks*, LOCAL FR (Oct. 27, 2017), <https://www.thelocal.fr/20171027/france-tackles-obesity-by-hiking-soda-tax-on-sugary-drinks>; see also Samuel, *supra* note 101. France has successfully implemented health policies to address the issue of obesity domestically. *Id.* These policies include enacting an SSB tax and placing restrictions on access to SSBs in restaurants and schools. *Id.* Such policies have assisted the French government in nudging its population toward healthier alternatives. *Id.*

201. See de Freytas-Tamura, *supra* note 93.

202. *Id.*

icies have allowed French schools to “promote better school meals” and enabled France to “include elements of nutrition education in curricula.”²⁰³ Promoting healthier habits in schools is significant because teaching children the importance of choosing healthier foods and beverages helps foster a healthier future generation.²⁰⁴

In addition to important changes in schools, France’s SSB tax and ban on free unlimited soda refills in restaurants contributes to a more robust and holistic health policy for the country to address the prevalence of obesity.²⁰⁵ Consequently, France’s health laws, acting in tandem, have resulted in a successful decrease in its obesity rates.²⁰⁶ As such, countries like Mexico and Belgium, which have soda taxes already in place but have not realized the same success,²⁰⁷ should look to France’s health laws as a model for designing and implementing new public health legislation in order to achieve their goals toward lowering obesity rates.²⁰⁸ Although Mexico’s tax against SSBs also targets “junk food,” such as unhealthy snacks and other sweets that do not provide any nutritional value,²⁰⁹ it has not seen the

203. Sara Capacci, et al., *Breaking Habits: The Effect of the French Vending Machine Ban on School Snacking and Sugar Intakes*, ASS’N FOR PUB. POL’Y ANALYSIS & MGMT. (Jan. 12, 2018), <http://www.appam.org/breaking-habits-the-effect-of-the-french-vending-machine-ban-on-school-snacking-and-sugar-intakes-jpam-featured-article/>. When banning unhealthy food and drinks from French schools, educational programs focused on nutrition and promoting healthier habits make the ban more impactful. *See id.* It would “make little sense to promote better school meals” if “less healthy foods” were still easily accessible at school. *Id.*

204. *Facts and Figures on Childhood Obesity*, WORLD HEALTH ORG. (Sept. 23, 2019), <https://www.who.int/end-childhood-obesity/facts/en/>. The WHO emphasizes the importance of teaching healthy habits to children, noting that, because “food preferences are established in early life,” promoting healthy diets at younger ages can be very impactful. *Id.*

205. Nathan Gray, *French Authorities Approve Soda Tax Legislation*, FOOD NAVIGATOR (Jan. 3, 2012), <https://www.foodnavigator.com/Article/2012/01/03/French-authorities-approve-soda-tax-legislation#>; *Stopping Slurping*, ECONOMIST (Nov. 26, 2015), <https://www.economist.com/finance-and-economics/2015/11/26/stopping-slurping>; de Freytas-Tamura, *supra* note 93.

206. *See* OECD, HEALTH POLICY IN FRANCE, *supra* note 108.

207. *See* OECD, OBESITY UPDATE, *supra* note 73; OECD, OVERWEIGHT OR OBESE POPULATION, *supra* note 120.

208. *See Free Soda*, *supra* note 93.

209. Belluz, *supra* note 42. Mexico has a so-called “junk food tax” targeting “non-essential” foods,” including “snacks, sweets, nut butters, [and] cereal-

same results as France in reducing the prevalence of obesity. Thus, it is necessary for Mexico and other countries to reevaluate current tax regimes and begin pushing additional health initiatives. These countries can take a page right out of France's book and start looking at ways to limit access to SSBs and other unhealthy foods, starting with targeting the accessibility of these products in schools.²¹⁰ Schools are a necessary starting point because childhood obesity has become "one of the most serious public health challenges of the 21st century."²¹¹ Consequently, educating children about the importance of forming healthy eating habits can prevent these children from remaining obese as adults and prevent the onset of NCDs caused by obesity.²¹² Moreover, countries can begin restricting free and unlimited soda refills in restaurants, like France did, to stop diners from overindulging in sugar.

2. Placing Limitations on SSB and Unhealthy Food Advertisements

Beyond mirroring successful models of taxation from other countries, governments can also look to analogous industries domestically. While there are pros and cons for comparing soda to alcohol and tobacco,²¹³ the regulations imposed on these products can serve as another useful starting point for reforming approaches to tackling the soda industry. There is wide international recognition that consuming tobacco and alcohol can have a negative impact on health.²¹⁴ Consequently, a plethora

based prepared products." *Id.* Despite a seven percent reduction in the purchase of these products, Mexico's obesity rates do not indicate the tax is effectively addressing obesity. *Id.*; see also OECD, OBESITY UPDATE, *supra* note 73.

210. de Freytas-Tamura, *supra* note 93.

211. *Childhood Overweight and Obesity*, WORLD HEALTH ORG. (2018), <https://www.who.int/dietphysicalactivity/childhood/en/>.

212. *Id.* The WHO explains that "[o]verweight and obese children are likely to stay obese in adulthood and more likely to develop noncommunicable diseases like diabetes and cardiovascular diseases at a younger age." *Id.* Because these health issues "are largely preventable," the WHO emphasizes the importance of prioritizing obesity prevention in children. *Id.*

213. See Art Carden, *Should we Regulate Sugar like Alcohol or Tobacco?*, FORBES (Feb. 2, 2012), <https://www.forbes.com/sites/artcarden/2012/02/02/should-we-regulate-sugar-like-alcohol-or-tobacco/#1c1da4b01cd4>.

214. Henry Saffer, *The Effect of Advertising on Tobacco and Alcohol Consumption*, NATIONAL BUREAU OF ECONOMIC RESEARCH (2004), <https://www.nber.org/reporter/winter04/saffer.html>.

of countries have enacted laws that restrict advertising alcohol and tobacco in some capacity.²¹⁵ These laws range from the time of day such advertisements may air on television, to regulating where these advertisements are allowed to appear, including, among other things, magazines, mailings, and merchandise.²¹⁶ In terms of tobacco, these limits on advertisements have led to decreased tobacco use.²¹⁷ Additionally, restrictions placed on alcohol advertising similarly appear to positively limit consumption of alcohol, particularly among young people.²¹⁸

It may reasonably be inferred that restricting soda advertising in a similar manner could yield great results, as marketing plays a vital role in SSB sales.²¹⁹ Similar to the way in which “exposure to alcohol advertising . . . influences . . . subsequent drinking behavior,” limiting exposure to SSB advertisements may result in less temptation for consumers to choose SSBs.²²⁰ By limiting SSB advertisements, there may be a more impactful increase in the consumption of water and other healthier alternatives.

Some countries have already begun passing legislation restricting advertisements of “junk foods,” such as “candy, fast-food, and soft drink[s].”²²¹ Since children tend to be a more vul-

215. See generally Lisa Henriksen, *Comprehensive Tobacco Marketing Restrictions: Promotion, Packaging, Price, and Place*, 21 *BMJ* 147, 147, 148 (2012) (discussing the global restrictions placed on tobacco advertising); see generally GLOBAL ADVERTISING LAWYERS ALLIANCE, *ALCOHOL ADVERTISING: A GLOBAL LEGAL PERSPECTIVE* (2015), http://iogt.org/wp-content/uploads/2015/03/Alcohol-Advertising_A-Global-Legal-Perspective.pdf.

216. Henriksen, *supra* note 215, at 148; see, *Alcohol Advertising: A Global Legal Perspective*, *supra* note 215.

217. Henriksen, *supra* note 215, at 149.

218. Lesley A. Smith & David R. Foxcroft, *The Effect of Alcohol Advertising, Marketing and Portrayal on Drinking Behaviour in Young People: Systematic Review of Prospective Cohort Studies*, *BMC PUB. HEALTH* 1, 7, 8 (2009), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2653035/pdf/1471-2458-9-51.pdf>. Data analyzed in this article indicates “that there is an association between alcohol advertising or promoting activity and subsequent alcohol consumption in young people.” *Id.*

219. See *Guide: Marketing Soft Drinks*, *supra* note 12.

220. Smith & Foxcroft, *supra* note 218.

221. Marisa Tsai, *Eight Countries Taking Action Against Harmful Food Marketing*, *FOOD TANK* (June 2018), <https://foodtank.com/news/2016/06/eight-countries-taking-action-against-harmful-food-marketing/>. As of June 2018, eight countries had passed legislation aimed at limiting children’s exposure to advertisements promoting junk foods. *Id.* These countries are Canada, Chile, France, Ireland, Mexico, Norway, Taiwan, and the UK. *Id.*

nerable population targeted by companies marketing SSBs and other junk foods, countries have sought to limit children's exposure to "junk-food advertising."²²² For example, the UK "passed a statutory ban on television advertising to children under [sixteen] of foods high in fats, sugar, and salt."²²³ The imposition of this ban has reduced youth exposure by thirty-seven percent, and the UK's Department of Health reports that "annual expenditures towards child-targeted advertisements have decreased 41 percent."²²⁴ While marketing restrictions may not be the only solution, as the UK still felt compelled to propose a tax on SSBs in 2016, limitations on advertisements may be an important aspect of strengthening governmental health policies. As instances of childhood obesity continue to increase, measures seeking to remedy and prevent this issue should be taken to the extent possible.

3. Revising Current Taxes to Adequately Address Stagnating and Climbing Obesity Rates

If passing further health measures is unattainable in the foreseeable future, countries should nevertheless work to improve their current models of taxation. The UK's approach to taxing SSBs is a helpful guide for reforming current soda and SSB taxes. In the UK, the focus of the tax has been on the sugar content of the product, rather than imposing a per ounce tax.²²⁵ Mexico, Belgium, and the US cities of Berkeley and Philadelphia currently follow a different approach, taxing SSBs based on the size of the container they are packaged in.²²⁶ Rather than encouraging manufacturers to reduce the amount of sugar in their products, this simply incentivizes manufacturers to package their products in smaller containers to reduce tax costs.²²⁷ As a result, even if people are drinking less²²⁸ when

222. *Id.*

223. *Id.*

224. *Id.*

225. Dewey, *supra* note 127.

226. WCRFI, USE ECONOMIC TOOLS, *supra* note 111; Mandaro, *supra* note 142; *Philadelphia Beverage Tax*, *supra* note 155; David Levine, *How Did Mexico Pass a Soda Tax?*, GOVERNING (May 2014), <https://www.governing.com/blogs/fedwatch/gov-mexicos-new-soda-tax.html>.

227. Zoe Wood, *Coca-Cola to Sell Smaller Bottles at Higher Prices in Response to Sugar Tax*, GUARDIAN (Jan. 5, 2018), <https://www.theguardian.com/society/2018/jan/05/coca-cola-to-sell-smaller-bottles-at-higher-prices-in-response-to-sugar-tax>.

they do indulge in a can of soda, they are still consuming high levels of sugar.²²⁹ Consequently, obesity rates are not falling as expected in countries that only take a per ounce approach to SSB taxes,²³⁰ and it may be time for countries to look to taxing sugar content instead, in order to force manufacturers to reformulate their products.

B. Improving Accessibility to Healthier Alternatives

While more health legislation targeting SSBs and other unhealthy products is crucial, these laws will not work without improving accessibility. Countries must make healthier beverage and food options more available to all economic classes, both in terms of price and ease of access.²³¹ Currently, in many countries like Mexico²³² and the US,²³³ purchasing unhealthy beverage options is often cheaper than purchasing healthier beverages.²³⁴ Additionally, in Mexico, clean drinking water can be significantly more difficult to access than unhealthy bever-

228. Bryan Bollinger & Steven Sexton, *Do Soda Taxes Work? Not Unless Retailers Raise Prices*, HARVARD BUS. R. (Jan. 10, 2018), <https://hbr.org/2018/01/do-soda-taxes-work-not-unless-retailers-raise-prices>.

229. Wood, *supra* note 227.

230. OECD, OBESITY UPDATE, *supra* note 73; See OECD, OVERWEIGHT OR OBESE POPULATION, *supra* note 120. While portion-size is a step in the right direction, by focusing primarily on sugar content instead, countries might be more successful in eliminating excessive sugar consumption and preventing obesity.

231. Ehara, *supra* note 76.

232. *Id.*

233. Case Adams, *People Drink Sugary Drinks Because They are Cheap*, REAL NATURAL (Mar. 25, 2013), <https://www.realnatural.org/one-reason-people-drink-more-sugary-drinks-they-cost-less/>.

234. See generally Evan Blecher, et al., *Global Trends in the Affordability of Sugar-Sweetened Beverages, 1990-2016*, 14 PREVENTING CHRONIC DISEASE, 1, 5 (2017). This peer reviewed research article examined SSB pricing trends in a variety of countries around the world between 1990 and 2016, finding that during that time period, SSBs had become more affordable in seventy-nine out of the eighty-two countries studied. *Id.* In the US, for example, “the real price of soda beverages declined . . . by a third between 1990 and 2007, while the real prices of fruits and vegetables (which impacts the price of natural juices) continuously increased.” COMMUNITY HEALTH COUNCILS, CALIFORNIA’S SWEETENED BEVERAGE TAX: A HEALTH IMPACT ASSESSMENT 8 (2017), https://www.pewtrusts.org/-/media/assets/external-sites/health-impact-project/chc_ssb_hia_2017_final.pdf.

ages, such as soda.²³⁵ When governments disregard the basic necessity of potable water, individuals are steered toward beverages that are safe to drink and accessible, which might only be SSBs.²³⁶ Due to the increasing affordability of SSBs, even in countries with soda taxes, soda consumption will likely continue to contribute greatly to the international obesity epidemic.²³⁷ It is therefore up to legislative bodies around the world to impose legislation that prohibits excessive pricing on nutritious products—such as fruits, vegetables, and clean water—to encourage lower-income individuals to purchase them.²³⁸ It should be the norm for healthier products to be the more affordable option. Until there are greater governmental responses, however, soda taxes cannot be effective if healthier products are still the more expensive option.²³⁹

CONCLUSION

The international community must begin to acknowledge the dangerous role that SSBs and other sugar-filled products play in the onset of NCDs caused by obesity.²⁴⁰ NCDs linked to poor consumption habits are currently the leading cause of death in the world today.²⁴¹ Taxes on SSBs have been a critical step toward addressing the role sugary products play in the onset of NCDs and obesity. Without new policies to address the threat that obesity poses to population health, however, it is likely that the risk of obesity-related illness will only continue to rise.²⁴² By imposing stricter regulations on the accessibility of SSBs, the sugar content in those products, and the manners in which they can be advertised, as well as developing more holis-

235. Lydia Blum, *Coca-Cola's Corporate Greed is Leaving Mexicans Thirsty*, COUNCIL OF HEMISPHERIC AFFS. (Aug. 14, 2018), <http://www.coha.org/coca-colas-corporate-greed-is-leaving-mexicans-thirsty/>.

236. *Id.* Without clean drinking water, individuals residing in areas that lack access to potable water are steered toward excessive consumption of sodas like Coca-Cola instead. *Id.*

237. *Id.* at 6.

238. WORLD HEALTH ORG., USING PRICE POLICIES TO PROMOTE HEALTHIER DIETS 8 (2015), http://www.euro.who.int/__data/assets/pdf_file/0008/273662/Using-price-policies-to-promote-healthier-diets.pdf.

239. *Id.* at 3.

240. *Id.* at 1, 3.

241. *Noncommunicable Diseases (NCD)*, *supra* note 28.

242. *See generally id.* (discussing the prevalence of NCDs caused by factors such as unhealthy diet and obesity).

tic food and beverage health initiatives, countries may very well see a substantial drop in obesity rates. Accordingly, it is important that international health organizations, such as the WHO, continue to raise awareness about the adverse health consequences that flow from diets high in food and drinks lacking proper nutrition. They can do this by encouraging countries to enact and reform legislation to better tackle the obesity epidemic.

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