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Fiscal Fact

Soda Tax Proposals Bubbling Up in California

By

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On November 6, voters in two California cities will consider imposing new excise taxes on soft drinks at the rate of 1 cent per ounce. In Richmond, California (across the Bay from San Francisco), voters will consider Measure N, which imposes a “business license fee” on soda providers, and Measure O, which spends the proceeds.¹ In El Monte, California (east of Los Angeles), voters will consider Measure H, which imposes a “sugary sweetened beverage license fee,” and Measure C, which spends the proceeds.² Additionally, in early August, officials in Baldwin Park, California rejected a proposed soda tax ballot initiative.³

In 2011, fourteen states considered similar legislation calling for increased excise taxes on soft drinks.⁴ Though thirty-three states currently treat soda differently than groceries for tax purposes and four states currently have mild excise taxes on soda (Arkansas, Tennessee, Virginia, and West Virginia), if passed, the proposals in Richmond and El Monte would be the largest taxes on soda in any American city. While labeled as only a penny per ounce, the tax could be considerable depending on the purchase (see Table 1).

Scott Drenkard is an economist at the Tax Foundation. The author would like to thank Andrew McIntosh, Joseph Henchman, Benjamin Stutts and Julia Morriss for their assistance on this report.

¹ See Ballotpedia, *City of Richmond Tax on Soda, Measure N (November 2012)*, [http://ballotpedia.org/wiki/index.php/City_of_Richmond_Tax_on_Soda,_Measure_N_\(November_2012\)](http://ballotpedia.org/wiki/index.php/City_of_Richmond_Tax_on_Soda,_Measure_N_(November_2012)).

² See Ballotpedia, *City of El Monte Soda Tax, Measure H (November 2012)*, [http://ballotpedia.org/wiki/index.php/City_of_El_Monte_Soda_Tax,_Measure_H_\(November_2012\)](http://ballotpedia.org/wiki/index.php/City_of_El_Monte_Soda_Tax,_Measure_H_(November_2012)); Ballotpedia, *El Monte Use of Revenue from Measure H, Measure C (November 2012)*, [http://ballotpedia.org/wiki/index.php/El_Monte_Use_of_Revenue_from_Measure_H,_Measure_C_\(November_2012\)](http://ballotpedia.org/wiki/index.php/El_Monte_Use_of_Revenue_from_Measure_H,_Measure_C_(November_2012)).

³ See Scott Drenkard, *Councilmembers in Baldwin Park, California Put Kibosh on Soda Tax Proposal*, TAX FOUNDATION TAX POLICY BLOG, Aug. 6, 2012, <http://taxfoundation.org/blog/councilmembers-baldwin-park-california-put-kibosh-soda-tax-proposal>.

⁴ See Scott Drenkard, *Overreaching on Obesity: Governments Consider New Taxes on Soda and Candy*, TAX FOUNDATION SPECIAL REPORT NO. 196 (Oct. 31, 2011), <http://taxfoundation.org/article/overreaching-obesity-governments-consider-new-taxes-soda-and-candy>.

In each case, the tax has been touted as essential to help decrease obesity rates and raise additional revenues for local government. So called “sin” taxes have often been seen by policymakers as an effective means of correcting social behavior that is deemed unhealthy or otherwise dangerous. Proponents say that obesity is a serious problem in the United States and that an overweight population can contribute to significantly higher healthcare costs and lower average life expectancies.

Table I: Proposed Additional Tax on Standard Soda Products

Standard Soda Product	Tax
7.5 oz. "mini-can" of soda	\$0.08
12 oz. can of soda	\$0.12
20 oz. bottle of soda	\$0.20
2-liter bottle of soda	\$0.68
6-pack of cans of soda	\$0.72
12-pack case of cans of soda	\$1.44
24-pack case of cans of soda	\$2.88

Tax represents local soda tax and does not include additional state or local sales taxes.

But it does not follow that excise taxation is the best method for addressing complex health issues. In general, proposals to tax unhealthy inputs anchor their argument on shaky economic ground that runs contrary to a significant body of empirical research and principles of sound taxation, which provide no economic justification for taxing soda at rates greater than the general sales tax.

Soda Taxes Hit the Poor the Hardest

Nearly all “sin” taxes disproportionately harm low-income individuals, as they spend a larger portion of their income on consumer goods (including soda). Both cities considering soda taxes have high proportions of low-income households: Richmond’s per-capita income of \$23,354 and unemployment rate of 15.1 percent

Figure 1. Per Capita Income in Richmond and El Monte Lower Than California

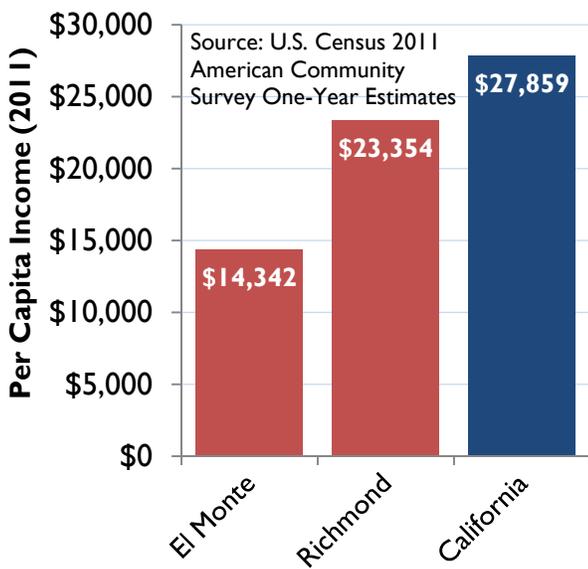
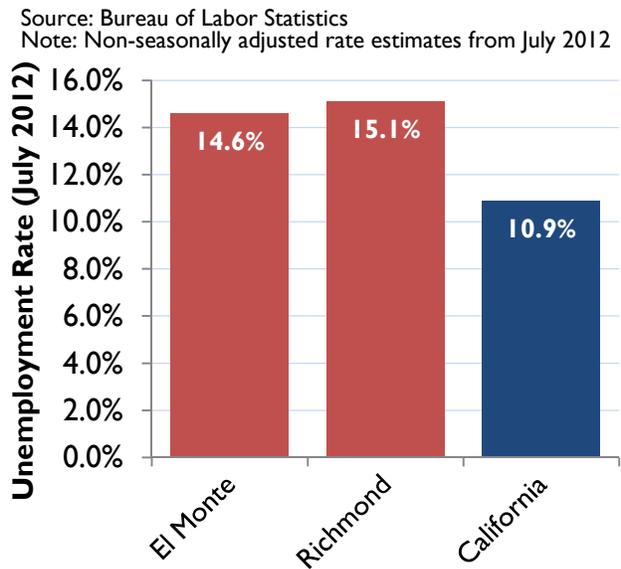


Figure 2. Unemployment Rates in El Monte and Richmond Higher than California



and El Monte’s per-capita income of \$14,342 and

unemployment rate of 14.6 percent are worse than statewide California averages (See Figures 1 and 2).⁵

A 2006 study by Chouinard et al. found that “fat taxes” similar in structure to the proposed soda tax harmed low-income families more than higher-income families both generally and because of diet choices. In the study sample, families with high incomes (defined at \$100,000 annually) suffered harm of \$24.29, half the harm of \$47.38 incurred by poor families (defined at \$20,000 annually).⁶

A 2008 study published by the *Journal of Urban Health* found an association between soda consumption and race, age, and income. The paper found that individuals with low incomes were nearly twice as likely to purchase and consume soda as were those whose incomes were significantly higher. In addition, the proportions of U.S.-born African Americans, Puerto Ricans, and Mexican Americans who reported consuming more than one soda per day was more than twice that of whites. There was also a relationship between educational attainment and soda consumption: individuals aged 18-24, men, and those with less than a college education were more likely to be frequent soda consumers. While the paper was based on 9,865 adults in New York City, the general observations likely hold true for most markets, particularly in areas with substantial minority populations.⁷

California Taxes are Already High

California citizens are already subjected to some of the highest tax rates in the nation. California’s multi-tiered income tax system has a top rate of 10.3 percent (surpassed only by Hawaii at 11 percent) and a separate statewide initiative will consider Proposition 30, which raises that top tax rate to 13.3 percent. The City of Richmond has a combined state and local sales tax of 8.75 percent, while El Monte taxes sales at 9.25 percent. If Proposition 30 passes, those rates will increase to 9 percent and 9.5 percent, respectively.⁸ Only two major U.S. cities—Birmingham and Montgomery, Alabama—tax general sales at a rate higher than 9.5 percent.⁹

⁵ U.S. Census, *2011 American Community Survey* (1 year estimates); Bureau of Labor Statistics (July 2012).

⁶ Hayley H. Chouinard, David E. Davis, Jeffrey T. LaFrance, & Jeffrey M. Perloff, *Fat Taxes: Big Money for Small Change*, FORUM FOR HEALTH ECONOMICS & POLICY, vol. 10, iss. 2, art. 2 (2007), <http://faculty.ses.wsu.edu/LaFrance/reprints/CDLP-BEP-2007.pdf>.

⁷ Colin D. Rehm, Thomas D. Matte, Gretchen Van Wye, Candace Young, & Thomas R. Frieden, *Demographic and Behavioral Factors Associated with Daily Sugar-sweetened Soda Consumption in New York City Adults*, 85 J. URBAN HEALTH 375 (2008), <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2329746>.

⁸ See David Block & Scott Drenkard, *Governor Brown’s Tax Proposal and the Folly of California’s Income Tax*, TAX FOUNDATION FISCAL FACT NO. 324 (July 31, 2012), <http://taxfoundation.org/article/governor-browns-tax-proposal-and-folly-californias-income-tax>.

⁹ Scott Drenkard, Alex Raut, & Kevin Duncan, *Sales Tax Rates in Major U.S. Cities*, TAX FOUNDATION FISCAL FACT NO. 296 (Apr. 11, 2012), <http://taxfoundation.org/article/sales-tax-rates-major-us-cities>.

Richmond and El Monte Would Tax Soda Higher Than Beer and Wine

At first glance, a “penny per ounce” tax on soda may seem insignificant. However, Richmond and El Monte’s proposed levy equates to a tax of \$1.28 per gallon of soda. This rate is larger than any beer excise tax in the U.S., the highest of which is \$1.07 per gallon in Alaska.¹⁰ Only twelve states tax wine at a higher rate than the proposed local soda tax rate, with California consumers paying a 20 cent per gallon tax and the median state taxing it at 72 cents per gallon.¹¹ Three states—New Hampshire, Vermont, and Wyoming—even tax distilled spirits at a lower rate than the proposed soda rate (See Table 2, Figure 3, and Figure 4).

Table 2: Proposed \$1.28 Tax on Soda is Higher than Many State Excise Taxes on Alcohol

	<u>Beer</u>	<u>Wine</u>	<u>Liquor</u>
California State Tax Rate (per gallon)	\$0.20	\$0.20	\$3.30
Highest State Tax Rate (per gallon)	\$1.07	\$2.50	\$26.70
Median State Tax Rate (per gallon)	\$0.23	\$0.72	\$5.50
Number of states with rates under proposed soda rate	50	39	3

Figure 3. California Excise Taxes

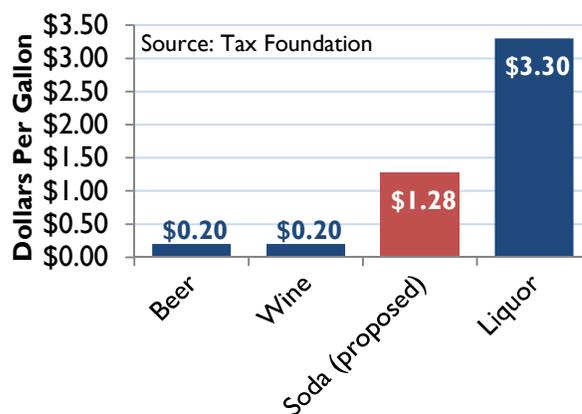
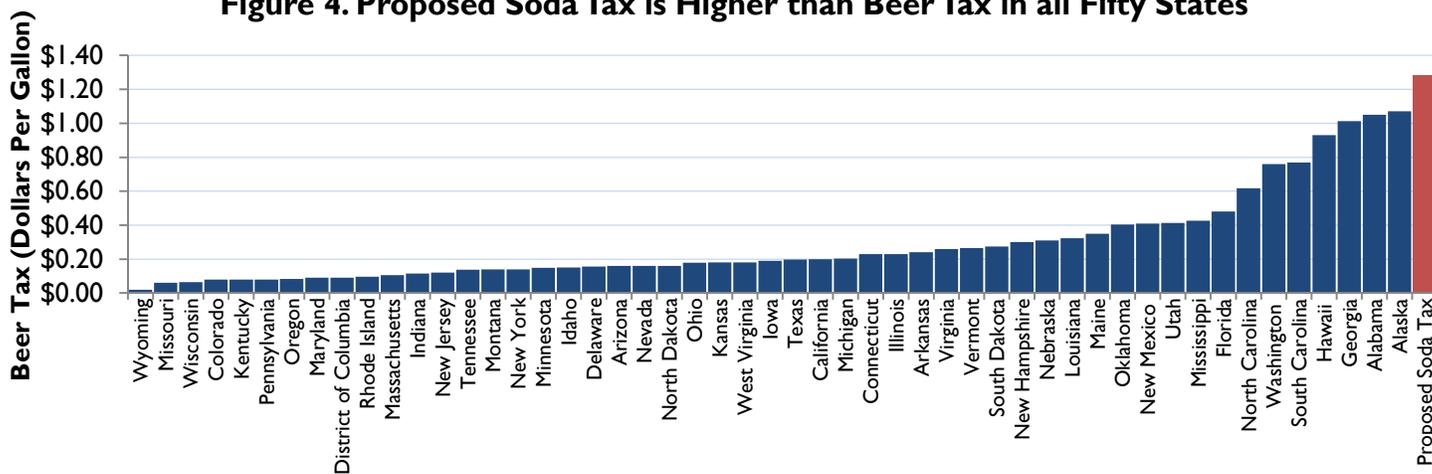


Figure 4. Proposed Soda Tax is Higher than Beer Tax in all Fifty States



¹⁰ Tax Foundation, *State Beer Excise Rates*, <http://taxfoundation.org/article/state-beer-excise-tax-rates-sept1-2011>.

¹¹ Tax Foundation, *State Wine Excise Rates*, <http://taxfoundation.org/article/state-table-wine-excise-tax-rates-january-1-2012>.

Poorly Defined Terms Will Cause Confusion and Compliance Problems

The vague language of the proposed tax increases has the potential to cause significant definitional problems as manufacturers, vendors, and consumers are forced to comply with the legislation. The text of the Richmond’s legislation imposes a “business licensing fee” of 1 cent per ounce on any business that sells or trades a “sugar-sweetened” beverage.¹² The statutory language fails to specify what level of sugar constitutes “sugar-sweetened,” perhaps meaning that any drink with even a granule of added sugar will be subject to the tax. Many products that no one would consider to be soda nevertheless may fall within the scope of the proposed taxes. One newspaper columnist noted that the measure also does not exempt baby formula, adding to concerns about the regressive nature of the tax.¹³

El Monte’s ballot measure is similarly broad but specifically excludes hydration beverages for children and seniors such as Pedialyte and Ensure. However, other hydration beverages such as Gatorade and other sports drinks generally associated with exercise are likely included in the tax base of both proposals. Both proposals also exclude sugar-sweetened beverage vendors under the age of eighteen with gross receipts under \$500 (lemonade stands).

Both initiatives permit individuals to purchase sugar-sweetened beverages outside the city and bring them in for personal and family consumption without paying the soda tax, as it is labeled a “fee” on vendors, not a “tax” on consumers. This attempt at labeling subterfuge will likely result in significant cross-border shopping of taxed items. This avoidance is especially likely in El Monte, which is no more than five miles wide, meaning that soda tax-free stores on the city borders would rarely be more than two miles away.¹⁴

Soda Taxes are Ineffective at Reducing Caloric Intake

While soda taxes are touted by supporters as an obesity deterrent and revenue raiser, several academic studies conclude that their affect is either minimal or nonexistent. In their 2010 study *The Effect of Soft Drink Taxes on Child and Adolescent Consumption*, Fletcher et al. found that soda taxes lead to a marginal decrease in consumption but that consumers substitute calories from other beverages. Additionally, the study found that

¹² Richmond City Council, Resolution No. 65-12, <http://ca-richmond2.civicplus.com/archives/67/65-12%20submits%20to%20the%20voters%20on%20the%20general%20municipal%20election-conformed%20with%20attachment%20A.pdf>.

¹³ Robert Rogers, *Richmond ‘soda tax’ ballot measure criticized as too broad*, CONTRA COSTA TIMES (Oct. 5, 2012), http://www.mercurynews.com/breaking-news/ci_21695123/richmond-soda-tax-ballot-measure-criticized-too-broad.

¹⁴ For more on cross-border tax avoidance, see Mehmet Serkan Tosun & Mark Skidmore, *Cross-Border Shopping and the Sales Tax: A Reexamination of Food Purchases in West Virginia* (Working Paper, Sep. 2005), <http://www.rri.wvu.edu/pdffiles/Tosunwp2005-7.pdf>. See also Randolph T. Beard, Paula A. Gant, & Richard P. Saba, *Border-Crossing Sales, Tax Avoidance, and State Tax Policies: An Application to Alcohol*, 64 SOUTHERN ECONOMIC JOURNAL 293 (1997).

a percentage point increase in the soda tax would lead to an increase of eight calories of milk consumed, meaning that people might actually gain weight, not lose it.¹⁵

A 2007 study published in the *Journal of Epidemiology & Community Health* provided broader insight into food substitution effects, this time considering a sales tax on saturated fat in the United Kingdom. The study found a strong tendency towards substitution and concluded that taxing the principal sources of saturated fat would be unlikely to reduce cardiovascular disease rates because the reduction in fat consumption would be offset by a rise in salt intake. Additionally, fruit consumption fell as a result of taxation of milk and cream.¹⁶

A 2007 study also by Fletcher et. al.¹⁷ reached similar conclusions, finding that it would require a very large tax increase on soda to substantially alter weight or body mass index (BMI). After first identifying that soft drink consumption accounts for only 7 percent of total energy intake, the study showed that an increase of 1 percentage point in the state soft drink tax rate would lead to a decrease in BMI of just 0.003 points. For perspective, the Center for Disease Control and Prevention defines a “healthy” BMI for a six foot tall adult male as between the large range of 18.5 and 24.9.

There is also evidence that taxes on soda lead people to drink more beer. A 2012 study by economists at Cornell University showed that for households prone to buying alcohol, there was a 172.4 ounce increase in beer consumption per month when a 10 percent tax was applied to soda, which equated to a heightened intake of 1930 calories in the same time frame. This raises concerns about potentially switching one public health problem for another.¹⁸

Externalities and Another Option

Some proponents of soda taxes claim that obese Americans create “externalities,” or shared costs, in the health care market. The story goes that obese people use more health care services than slimmer individuals, and these health care costs are shared through the socialized insurance pools of Medicare, Medicaid, and third party insurance providers. An appropriately priced tax, they argue, would force obese individuals to bear the full cost of the unhealthy habits that they currently shift onto others in the economy.¹⁹

¹⁵ Jason M. Fletcher, David E. Frisvold, & Nathan Tefft, *The Effects of Soft Drink Taxes on Child and Adolescent Consumption and Weight Outcomes*, 94 J. PUBLIC ECONOMICS 967 (Sep. 2010), <http://medicine.yale.edu/labs/fletcher/www/soda.pdf>.

¹⁶ Oliver Mytton, Alastair Gray, Mike Rayner, & Harry Rutter, *Could targeted food taxes improve health?*, 61 J. EPIDEMIOLOGY & COMMUNITY HEALTH 689 (2007), <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2652984>.

¹⁷ Jason M. Fletcher, David Frisvold, & Nathan Tefft, *Can Soft Drink Taxes Reduce Population Weight?*, 28 CONTEMPORARY ECONOMIC POLICY 23 (2010), http://sitemaker.umich.edu/frisvold/files/soda_taxes_and_obesity_20070817web.pdf.

¹⁸ Brian Wansink, Drew Hanks, David R. Just, John Cawley, Jeffrey Sobal, Elaine Wethington, William D. Shulze, & Harry M. Kaiser, *From Coke to Coors: A Field Study of a Sugar-Sweetened Beverage Tax and its Unintended Consequences* (2012), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2079840.

¹⁹ For a detailed look at “Pigouvian” taxes designed to offset externalities, see Bryan Caplan, *Externalities*, in THE CONCISE ENCYCLOPEDIA OF ECONOMICS, <http://www.econlib.org/library/Enc/Externalities.html>. On externalities broadly, see Ronald

However, proponents of this line of logic are quick to jump to increasingly economically distortive public policy measures like taxation. The shared cost problem they describe only exists because of the socialized and regulated nature of the nation's health care system and could be more easily remedied through reforms in Medicare, Medicaid, and third-party insurance pools. A simpler and more straightforward approach would be to allow insurance companies to charge higher premiums for obese individuals, a practice that is generally illegal at present. This would directly address obesity as the source of shared health costs as opposed to clumsily taxing soda, which is just one of many caloric inputs. It would also allow consumers to alter their eating patterns as they see fit, as opposed to providing a one-size-fits-all diet regulated by the tax code.

Conclusion

While public health advocates claim that soda taxes are a useful tool to combat obesity, economic evidence shows that they have minimal effects because consumers are likely to substitute other calorie-laden products for soda. In practice, soda taxes just create compliance difficulties as businesses are forced to reclassify new products for different tax treatment.

Individual diet choices are determined by each person based on nuanced information and individualized beliefs about what is appropriate for their bodies. The tax code is far too blunt an instrument to address such an important public health issue.

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Coase, *The Problem of Social Cost*, 3 J. OF LAW AND ECONOMICS 1 (1960),
http://weber.ucsd.edu/~jlbroz/Courses/POLI200C/syllabus/Coase_social%20cost.pdf.