

The World's Largest Open Access Agricultural & Applied Economics Digital Library

## This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.





The Magazine of Food, Farm and Resource Issues

3rd Quarter 2011 | 26(3)

## SHOULD SOFT DRINKS BE TAXED MORE HEAVILY?

**Carlisle Ford Runge** 

JEL Classifications: H, H2, H25 Keywords: Soft Drink Taxes; Obesity; Substitution Effects

This article is part of a series of Policy Issues articles on Soda Tax. You can also find articles on <u>Can Taxing Sugary</u> <u>Soda Influence Consumption and Avoid Unanticipated Consequences?</u>, <u>Sugar-Sweetened Beverage Taxation as</u> <u>Public Health Policy-Lessons from Tobacco, Soda Taxes and Substitution Effects: Will Obesity be Affected?</u>, <u>Better</u> <u>Milk than Cola: Soft Drink Taxes and Substitution Effects, Evaluating Excise Taxes: The Need to Consider Brand</u> Advertising, and Caloric Sweetened Beverage Taxes: The Good/Food/Bad Food Trap as part of this theme.

The articles in this theme consider a controversial policy issue: whether sweetened soda should be subject to increased taxation. The justification for such taxes relates both to economics and public health, but such taxes are hardly without critics. The authors of these articles are drawn from numerous fields: medicine, public health, economics, applied economics, political science, public affairs, and industry. They represent a cross-section of informed opinion and analysis that we hope will be helpful as the debate unfolds.

The first article, by physician Jason Block and Walter C. Willett of the Harvard Medical School and Harvard School of Public Health, respectively, broadly examines the current situation and whether sweetened soda consumption will decline in the face of tax increases—and by how much. They go on to examine possible unintended consequences, including a rise in unsweetened soda and other beverage consumption, each with their own special issues and problems.

The second article, by Frank Chaloupka, Lisa Powell, and Jamie Chriqui of the Departments of Economics and Political Science of the University of Illinois at Chicago, examines the lessons for soda from tobacco taxation. Worldwide tobacco taxes have reduced consumption and raised substantial revenue, often used to further reduce smoking. The authors conclude that sizable taxes on sweetened soda would also lead to significant reductions in consumption, reduce obesity and generate revenues available for further prevention and control, especially if designed consistently with the World Health Organization (WHO) best practices guidelines.

The third article, by Jason Fletcher of the Yale School of Public Health, closely examines the data on substitution effects from soda taxes. He finds that such a tax would encourage the substitution of juice and whole milk which are also quite caloric. The result is to blunt the effect of soda taxes in reducing obesity, unless substitutes are made less available, especially for children in schools. Although soda taxes may have minimal impacts on obesity, Fletcher concludes that they may still enhance public health by reducing the consumption of empty calories and preventing tooth decay.

The fourth article, by Carlisle Ford Runge, Justin Johnson, and Carlisle Piehl Runge of the University of Minnesota and Davenport College, Yale University, examines the theory of sin taxes and the evidence on substitution effects. Soda taxes are supported from a welfare-theoretic perspective, but raise questions over substitution effects. Citing Fletcher's earlier work, they argue that reduced soda consumption is a step forward in its own right. Moreover, milk-substitution responses, especially of reduced fat milk, have salutary effects compared to soda.

The fifth article, by Joshua Berning of the University of Connecticut at Storrs, considers whether a soda tax and its impact on prices may be offset by aggressive advertising by soft drink companies, which already spend tens of millions to market their products. These effects are not fully reflected in price-response assessments. Advertising can

affect not only demand elasticities, but the regressivity of excise taxes and their substitution effects. A converse case can also be made: advertising can be used to promote consumption of healthier foods.

The sixth and last article provides a perspective contrary to the others, reflecting Robbin S. Johnson's long experience in the private sector at Cargill. Johnson first notes the complexity and multifaceted nature of the food/obesity nexus and argues that soda taxes are a simplistic and ill-focused policy response. In addition to the problems of substitution, Johnson argues against facile comparisons of tobacco and soda taxes and in favor of fairer taxes and education efforts which might actually gain the support of soft drink manufacturers themselves.

Carlisle Ford Runge (frunge @umn.edu) is Distinguished McKnight University Professor of Applied Economics and Law, Department of Applied Economics, University of Minnesota.

The views expressed are those of the authors and do not necessarily reflect the positions of the Federal Reserve Bank of Kansas City, the Federal Reserve System, or Purdue University.

© 1999-2011 Choices. All rights reserved. Articles may be reproduced or electronically distributed as long as attribution to Choices and the Agricultural & Applied Economics Association is maintained.

The farmdoc project distributes Choices in partnership with the Agricultural and Applied Economics Association.

click here to visit choicesmagazine.org >>